

Section 1: The Nature of Children's Development

Chapter 1: Introduction

LEARNING GOALS

1. Explain why it is important to study children's development and identify five areas in which children's lives need to be improved.
2. Discuss processes, periods, cohort effects, and issues in development.
3. Summarize why research is important in child development, the main theories of child development, and research methods, designs, and challenges.

CHAPTER OUTLINE

Please note that much of this information is quoted from the text.

I. WHY IS CARING FOR CHILDREN IMPORTANT?

- **Development** is the pattern of movement or change that begins at conception and continues through the human life span. It includes both growth and decline.

A. The Importance of Studying Children's Development

- Studying children's development is important because it does the following:
 - Becoming a better educator and parent
 - Gives us insight about our own lives
 - Raises some provocative issues

B. Improving the Lives of Children

1. Health and Well-Being

- The influence of lifestyles and psychological states of both parent and child can have a major impact on the health and well-being of children.

CONNECTING WITH CAREERS: Gustavo Medrano, Clinical Psychologist

2. Parenting

- Many questions, including controversial ones, will shed light into the role of parenting in children's lives and development.
- Children are the future of our society.
- Understanding the nature of children's development can help you become a better parent.

3. Education

- There is widespread agreement that society needs to continuously improve education for all children.

4. Sociocultural Contexts and Diversity

- Health and well-being, parenting, and education—like development itself—are all shaped by their sociocultural context.
- **Context** refers to the settings in which development occurs.
- **Culture** encompasses the behavior patterns, beliefs, and all other products of a specific group of people which are passed on from generation to generation.
- **Cross-cultural studies** compare aspects of two or more cultures.
- **Ethnicity** is rooted in cultural heritage, nationality, race, religion, and language.
- **Socioeconomic status (SES)** refers to a person's position within society based on occupational, educational, and economic characteristics.

5. Gender

- **Gender** is a key dimension of children's development; it refers to the characteristics of people as girls/women and boys/men, also includes more genders than this such as transgender and nonbinary gender.
- Each of these dimensions of the sociocultural context—culture, ethnicity, SES, and gender—helps to mold how children develop.

6. Resilience, Social Policy, and Children's Development

- Some children develop confidence in their abilities despite negative stereotypes about their gender or their ethnic group, and some children triumph over poverty or other adversities. They show *resilience*.

- **Social policy** is a government's course of action designed to promote the welfare of its citizens.
- Researchers increasingly are undertaking studies that they hope will lead to wise and effective decision making about social policy around the world.
- The U.S. figure of children under 18 years of age living in poverty in 2019 was 14.4% .
- Developmental psychologists and other researchers have examined the effects of many government policies, seeking to help families living in poverty improve their well-being.
- A study of the effects of the Minnesota Family Investment Program (MFIP) found that increases in the incomes of working poor parents were linked with benefits for their children.
- Ascend is a two-generation education intervention being ducted by the Aspen Institute (2022). The intervention emphasizes education, economic support, and social capital. It is a large-scale effort to help children escape poverty.

CONNECTING WITH DIVERSITY: Gender, Families, and Children's Development

- Around the world, the experiences of male and female children and adolescents continue to be quite different.
- In many countries, adolescent females have less freedom to pursue a variety of careers and engage in various leisure acts than males. Females still

experience considerable discrimination. Many girls continue to be denied access to education.

II. WHAT CHARACTERIZES DEVELOPMENT?

A. Biological, Cognitive, and Socioemotional Processes

- **Biological processes** produce changes in the individual's body.
- **Cognitive processes** are changes in the individual's thought, intelligence, and language.
- **Socioemotional processes** involve changes in the individual's relationships with other people, changes in emotions, and changes in personality.
- The processes are inextricably intertwined, as demonstrated in these two rapidly emerging fields:
 - *Developmental cognitive neuroscience*, which explores links between development, cognitive processes, and the brain
 - *Developmental social neuroscience*, which examines connections between socioemotional processes, development, and the brain
- Biological, cognitive, and socioemotional processes can interact and influence each other.

B. Periods of Development

- For purposes of organization and understanding, a child's growth is commonly described in terms of developmental periods that correspond to specific age ranges.

- The **prenatal period** is the time from conception to birth.
- **Infancy** is the developmental period extending from birth to 18 or 24 months.
- **Early childhood** extends from the end of infancy to about 5 or 6 years.
- **Middle and late childhood** extends from about 6 to 11 years.
- **Adolescence** is the developmental period of transition from childhood to early adulthood, entered at approximately 10–12 years of age and ending at 18–22 years of age.
- Today, developmental psychologists do not suggest that change ends with adolescence.

C. Cohort Effects

- A *cohort* is a group of people who are born at a similar point in history and share similar experiences as a result, such as growing up in the same city around the same time.
- **Cohort effects** are due to a person's time of birth, era, or generation but not to actual age.
- Generations have been given labels by the popular culture. The most recent group to have “grown up” are called **Millennials**, referring to the generation born roughly between 1980 and 1999—the first to come of age and enter emerging adulthood in the new millennium.
 - Millennial characteristics include their connection to technology and their ethnic diversity.

- Generation Z or post-millennial refers to the generation born after 1997.

The name for this generation has not been selected yet. They are even more technologically sophisticated and ethnically diverse than Millennials.

They are also the best-educated generation ever, and are more likely to go to college.

D. Issues in Development

1. Nature and Nurture

- The **nature–nurture issue** focuses on the extent to which development is mainly influenced by nature (biological inheritance) or nurture (environmental experiences).

2. Continuity and Discontinuity

- The **continuity–discontinuity issue** focuses on the extent to which development involves gradual, cumulative change (continuity) or distinct stages (discontinuity).

3. Early and Later Experience

- The **early–later experience issue** focuses on the degree to which early experiences (especially in infancy) or later experiences are the key determinants of the child’s development.

4. Evaluating the Developmental Issues

- Most developmentalists do not take extreme positions on these issues, although debates still ensue.

III. HOW IS CHILD DEVELOPMENT A SCIENCE?

A. The Importance of Research

- Science is defined not by *what* it investigates, but by *how* it investigates.
- Scientific research is objective, systematic, and testable.
- Research in child development utilizes the scientific method.
- The **scientific method** is essentially a four-step process: (1) conceptualize the problem to be studied, (2) collect data, (3) analyze the data to reach conclusions, and (4) revise research conclusions and theory.
- A **theory** is an interrelated, coherent set of ideas that helps explain and make predictions.
- A **hypothesis** is a specific testable assumption or prediction.

B. Theories of Child Development

- Five theoretical orientations are discussed in this chapter. They should be viewed as complementary instead of contradictory.

1. Psychoanalytic Theories

- **Psychoanalytic theories** describe development as primarily unconscious (beyond awareness) and heavily colored by emotion.

a. Freud's Theory

- Freud proposed that personality has three structures: (1) id, (2) ego, and (3) superego.

- Our adult personality results from the way we resolve crises in the five stages of psychosexual development, which he named oral, anal, phallic, latency, and genital.
- Many of today's psychoanalytic theorists believe that Freud overemphasized sexual instincts. Instead, they place more emphasis on cultural experiences as determinants of an individual's development.

b. Erikson's Psychosocial Theory

- **Erikson's theory** proposes eight psychosocial stages of development, which unfold throughout the life span.
- Each stage represents a crisis that must be resolved for healthy development to occur.
 - *Trust versus mistrust*
 - *Autonomy versus shame and doubt*
 - *Initiative versus guilt*
 - *Industry versus inferiority*
 - *Identity versus identity confusion*
 - *Intimacy versus isolation*
 - *Generativity versus stagnation*
 - *Integrity versus despair*

CARING CONNECTIONS: Strategies for Parenting, Educating, and Interacting with Children Based on Erikson's Theory

- Positive strategies for interacting with children based on Erikson's theory include the following:
 - Nurture infants and develop their trust, then encourage and monitor toddlers' autonomy.
 - Encourage initiative in young children.
 - Promote industry in elementary school children.
 - Stimulate identity exploration in adolescence.

c. Evaluating the Psychoanalytic Theories

- Contributions:
 - Role of early experiences.
 - Developmental framework for understanding personality.
 - Family relationships.
 - Unconscious mind.
- Criticisms:
 - Lack of scientific support.
 - Data came from individuals' reconstruction of the past.
 - Sexual underpinnings are given too much importance (Freud).
 - Too much emphasis on the unconscious mind.
 - These theories present a negative image of humans and gender biased (Freud).
 - Treating Western culture and males as the measure for evaluating everyone else.

2. Cognitive Theories

- Cognitive theories emphasize conscious thoughts.

a. Piaget's Cognitive Developmental Theory

- **Piaget's theory** states that children go through four stages of development as they actively construct their understanding of the world.
- Two process that underlie this are **organization** and **adaptation**.

- To make sense of our observations and experiences, we must organize them in some meaningful way.
- We also adapt our thinking to include new ideas and experiences.
- Piaget proposed four stages of cognitive development, each of which is age-related and represents a qualitatively distinct way of thinking.
 - *Sensorimotor stage*
 - *Preoperational stage*
 - *Concrete operational stage*
 - *Formal operational stage*

b. Vygotsky's Sociocultural Cognitive Theory

- Like Piaget, Vygotsky believed that children actively construct their knowledge.
- **Vygotsky's theory** emphasizes how culture and social interaction guide cognitive development.
- Through social interaction, especially with more skilled peers and adults, children learn to use the tools that will help them adapt and be successful in their culture.

c. Information-Processing Theory

- **Information-processing theory** emphasizes that individuals manipulate information, monitor it, and strategize about it.
- Individuals develop an increasing capacity for processing information in a gradual way, rather than in stages.

- Siegler, an expert on children's information processing, emphasizes that an important aspect of development is learning good strategies for processing information.

d. Evaluating Cognitive Theories

- Contributions:
 - These theories offer a positive view of development.
 - There is an emphasis on the active construction of knowledge and understanding.
 - Piaget's and Vygotsky's theories underscore the importance of examining developmental changes in children's thinking.
 - Information-processing theory offers detailed descriptions of cognitive processes.

- Criticisms:
 - Skepticism exists about the timing and manner of development according to Piaget's stages. Stages are not as uniform as Piaget theorized.
 - Little attention is given to individual variations in cognitive development.
 - Information-processing theory does not provide an adequate description of developmental changes in cognition.
 - Some theorists argue that these theories do not give enough credit to unconscious thought.

3. Behavioral and Social Cognitive Theories

- *Behaviorism* holds that we can study scientifically only what can be directly observed and measured.

a. Pavlov's Classical Conditioning

- Pavlov discovered the principle of classical conditioning, in which a neutral stimulus produces a response originally produced by another stimulus.
- John Watson and Rosalie Rayner (1920) demonstrated that classical conditioning occurs in human beings.

b. Skinner's Operant Conditioning

- According to B. F. Skinner, through *operant conditioning*, the consequences of a behavior produce changes in the probability of the behavior's occurrence.
- If a behavior is followed by a pleasant consequence, it is more likely to recur, but if it is followed by an unpleasant consequence, it is less likely to recur.

- Rewards and punishments that occur in the environment actually shape development.

c. **Bandura's Social Cognitive Theory**

- **Social cognitive theory** holds that behavior, environment, and cognition are the key factors in development.
- *Observational learning* occurs through observing what others do.
- Bandura proposes a model of learning and development that involves interaction among the behavior, the person/cognition, and the environment.

d. **Evaluating Behavioral and Social Cognitive Theories**

- Contributions:
 - They provide an emphasis on the importance of scientific research.
 - They focus on the environmental determinants of behavior.
 - Bandura identifies and explains observational learning.
 - Social cognitive theory includes person/cognitive factors.
- Criticisms:
 - Pavlov and Skinner give too little emphasis on cognition.
 - Too much emphasis is given to environmental determinants.
 - Inadequate attention is given to developmental changes.
 - There is inadequate recognition of human spontaneity and creativity.

4. **Ethological Theory**

- **Ethology** stresses that behavior is strongly influenced by biology, is tied to evolution, and is characterized by critical or sensitive periods.

- Lorenz's study of *imprinting* in geese showed that innate learning within a limited *critical period* is based on attachment to the first moving object seen, usually the mother.
- Bowlby argued that the first year of life is a sensitive period for the development of social relationships. The quality of attachment to a caregiver has important consequences throughout the life span.
- Contributions of ethological theory:
 - It provides an increased focus on the biological and evolutionary basis of development.
 - Ethological theory promotes the use of careful observations in naturalistic settings.
 - It emphasizes sensitive periods of development.
- Criticisms of ethological theory:
 - The critical period and sensitive period concepts may be too rigid.
 - The emphasis on biological foundations is too strong.
 - Cognition receives inadequate attention.
 - The theory is better at generating research with animals than with humans.

5. Ecological Theory

- Ecological theories emphasize the impact of environmental contexts on development.

- **Bronfenbrenner's ecological theory** consists of five interacting environmental systems, ranging from direct interactions with social agents to cultural influences.
 - The *microsystem* is the setting in which the individual lives, including direct interactions with the person's family, peers, school, and neighborhood.
 - The *mesosystem* involves relations among microsystems or connections among contexts. Relations of family experiences to school experiences, school experiences to church experiences, and family experiences to peer experiences would be included in this system.
 - The *exosystem* is involved when experiences in another social setting, in which the individual does not have an active role, influence what the individual experiences in an immediate context.
 - The *macrosystem* involves the culture in which individuals live.
 - The *chronosystem* involves the patterning of environmental events and transitions over the life course, as well as sociohistorical circumstances.
- Contributions of ecological theory:
 - A systematic examination of macro- and micro-dimensions of environmental systems.
 - Attention to connections between environmental settings (mesosystem).
 - Emphasis on a range of social contexts beyond the family.
- Criticisms of ecological theory:

- Inadequate attention to biological and cognitive processes.

6. An Eclectic Theoretical Orientation

- An **eclectic theoretical orientation** does not follow any one theoretical approach because no one theory can explain the complexity of children's development. Rather, it selects and uses, from each theory, whatever is considered the best in it.

C. RESEARCH METHODS FOR COLLECTING DATA

1. Observation

- Scientific observation is highly systematic: it requires knowing what to look for, conducting observations in an unbiased manner, accurately recording and categorizing what you see, and communicating your observations.
- Observations occur in either laboratories or naturalistic (everyday world) settings.
- A **laboratory** is a controlled setting from which many of the complex factors of the real world have been removed.
- In **naturalistic observations**, behavior is observed outside of a laboratory in the real world.

2. Survey and Interview

- One way to quickly gather information about experiences, beliefs, and feelings is to ask people about them.
- Good surveys involve clear, unbiased, and unambiguous questions.

- One limitation of interviews and questionnaires is that people often give socially desirable answers rather than honest answers.

3. Standardized Test

- A **standardized test** has uniform procedures for administration and scoring. Many standardized tests allow a person's performance to be compared with that of other individuals.
- These tests provide information about individual differences among people.
- One criticism of standardized tests is that they do not predict behaviors in nontest situations, and they assume a person's behavior is consistent and stable.

4. Case Study

- A **case study** is in-depth look at a single individual.
- Generalizability can be a problem because each subject has a unique genetic makeup and life experiences.
- Involves judgments of unknown reliability.

5. Physiological Measures

- Physiological measures are being employed more and more in developmental research.
- Physiological measures include such things as hormone levels, blood samples, *functional magnetic resonance imaging* (fMRI), and so on.

D. RESEARCH DESIGNS

1. Descriptive Research

- The goal of **descriptive research** is to observe and record behavior.
- All the aforementioned data collection techniques are considered to be descriptive methods.
- Descriptive research cannot tell us about causation.

2. Correlational Research

- The goal of **correlational research** is to describe the strength of the relation between two or more events or characteristics. It is useful because the stronger the two events are correlated, the more effectively we can predict one from the other.
- A **correlation coefficient** is the statistical measure that is used to examine relations between variables. This number ranges from +1.00 to −1.00.
- Correlation does not equal causation.

3. Experimental Research

- An **experiment** is a carefully regulated procedure in which one or more factors believed to influence the behavior being studied are manipulated while all other factors are held constant.
- If the behavior changes when a factor is manipulated, we say the manipulated factor causes the behavior to change.
- “Cause” is the factor being manipulated. “Effect” is the behavior that changes as a result of the manipulation.

a. Independent and Dependent Variables

- The *independent variable* is the manipulated or experimental variable.

- The *dependent variable* is the factor that is measured in an experiment, sometimes called the test or outcome variable.

b. Experimental and Control Groups

- Experiments can involve one or more experimental groups and one or more control groups.
- An experimental group is a group whose experience is manipulated.
- A *control group* is a comparison group that resembles the experimental group as closely as possible and is treated in every way like the experimental group except for the manipulated factor (independent variable).
- The control group serves as a baseline against which the effects of the manipulated condition can be compared.
- *Random assignment* is an important principle for deciding whether each participant will be placed in the experimental group or in the control group. Assignment of the participants to either the experimental or the control group is by chance.

4. Time Span of Research

- Researchers in child development can study different individuals of varying ages and compare them, or they can study the same individuals as they age over time.

a. Cross-Sectional Approach

- In the **cross-sectional approach**, individuals of different ages are compared at one time.

- This time-efficient approach does not require time for individuals to age.
- It provides no information about how individuals change or about the stability of their characteristics.

b. Longitudinal Approach

- In the **longitudinal approach**, the same individuals are studied over time.
- This provides information regarding stability and change in development and the importance of early experience for later development.
- The approach is expensive and time consuming, but it has the advantage of eliminating the cohort effect.
- There is potential for subjects to drop out due to sickness, loss of interest, or moving away.
- The subjects that remain in the study could bias the results because they may be dissimilar from the ones that dropped out.

CONNECTING WITH RESEARCH: Why Are Research Journals Important in the Field of Child Development?

- Regardless of field, you can benefit by learning about the journal process.
- A journal publishes scholarly and academic information, usually in a specific domain.
- An increasing number of journals publish information about child development.

- Every journal has a board of experts who evaluate articles submitted for publication.
- Journal articles are usually written for other professionals in the specialized field of the journal's focus.
- They usually have the following elements: abstract, introduction, method, results, discussion, and references.

E. RESEARCH CHALLENGES

1. Conducting Ethical Research

- The APA's ethical guidelines require that researchers keep participants' interests in mind.
 - *Informed consent*: Participants in research are told what their participation will entail and any risks that might be involved.
 - *Confidentiality*: All data are kept completely confidential and anonymous.
 - *Debriefing*: Upon completion, participants are informed of the purpose and methods used in the study.
 - *Deception*: Knowing the purpose of a research study may cause participants to behave differently than they would otherwise. Thus, researchers often use deception to hide the true purpose of a study and to promote natural behavior in participants. Deception should only be used if participants are protected from harm. The use of deception is a debated issue, but if it is employed, participants should be told about the true purpose of the study as soon as possible after the study is completed.

2. Minimizing Bias

a. Gender Bias

- It is important to keep in mind that you cannot generalize research conducted on one gender to the other gender.

b. Cultural and Ethnic Bias

- Cultural and ethnic bias can be fought by including more people from diverse ethnic groups in research.
- **Ethnic gloss** involves using an ethnic label such as *African American* or *Latino* in a superficial way that portrays an ethnic group as being more homogeneous than it really is.

CONNECTING WITH CAREERS: Pam Reid, Educational and Developmental Psychologist

IV. Appendix: Careers in Children's Development

CONNECTING WITH CAREERS: Valerie Pang, Professor of Teacher Education

KEY TERMS

adolescence

cohort effects

biological processes

context

Bronfenbrenner's ecological theory

continuity–discontinuity issue

case study

correlation coefficient

cognitive processes

correlational research

cross-cultural studies	laboratory
cross-sectional approach	longitudinal approach
culture	middle and late childhood
descriptive research	Millennials
development	naturalistic observation
early childhood	nature–nurture issue
early–later experience issue	Piaget’s theory
eclectic theoretical orientation	prenatal period
Erikson’s theory	psychoanalytic theories
ethnic gloss	scientific method
ethnicity	social cognitive theory
ethology	social policy
experiment	socioeconomic status (SES)
gender	socioemotional processes
hypothesis	standardized test
infancy	theory
information-processing theory	Vygotsky’s theory

KEY PEOPLE

Albert Bandura	Sigmund Freud	Robert Siegler
John Bowlby	Konrad Lorenz	B. F. Skinner
Urie Bronfenbrenner	Ann Masten	Lev Vygotsky
Marian Wright Edelman	Ivan Pavlov	
Erik Erikson	Jean Piaget	

LECTURE SUGGESTIONS

Lecture Suggestion 1: Rights of the Child

The authors discuss contemporary concerns about children, such as health, families, education, and the sociocultural contexts of culture, ethnicity, and gender. Do children really have a *right* to certain things like education and health care, or are these just privileged opportunities that are afforded children in countries whose governments are committed to and able to afford at least a minimum standard of life experience?

The United Nations Convention on the Rights of the Child articulates a set of standards and obligations that defines human rights for children worldwide. It includes civil and political rights as well as economic, social, and cultural rights. Prepare a lecture about the convention, its principles, the rights it articulates, the history of the convention, and its current status. What are

the legal rights of minors (children under age 18)? Do these rights apply to all nations? Where does the United States stand with regard to guaranteeing children certain opportunities? What organizations or governmental agencies are responsible for protecting children?

UNICEF maintains a website that includes the history of the Convention on the Rights of the Child, the principles, and the 54 articles (see <http://www.unicef.org/crc/>). Students might be surprised to learn that attention to children's rights is a relatively recent historical phenomenon. Although the United States signed the convention in 1995, it has not ratified it.

The Convention on the Rights of the Child outlines four principles, as follows:

- Nondiscrimination
- Best interests of the child
- Survival and development
- Participation

The articles define specific legal rights that must be respected and protected. Some examples are listed below. Please see the UNICEF website for a full copy of the text.

- The right to have a name, which includes the right to be registered after birth and to be given a nationality
- Protection from illicit transfer abroad and nonreturn
- Freedom of thought, conscience, and religion
- That child refugees be given protection and humanitarian assistance
- The right of mentally or physically disabled children to enjoy a decent life, dignity, and participation in the community
- High standards of health and treatment of illness
- The right to education
- The right to rest, leisure, play, and recreation
- Freedom from torture, cruel or inhuman treatment, or punishment

All the principles and articles in the Convention on the Rights of the Child are relevant to the developmental processes featured through all chapters of the textbook. There is sufficient

material in the articles to have a weekly in-class discussion, debate, or other activity to complement each chapter.

Because the current status of children worldwide is closely tied to the continued evolution or potential devolution of humankind, students anticipating various careers will be able to generate a vision of how their chosen profession might contribute to improving the plight of all children. It is obvious how careers in medicine, home economics, public health, social work, and education might contribute to worldwide well-being. However, students anticipating careers in law, architecture, engineering, economics, marketing, information systems, business, and hospitality might need to reflect more deeply to anticipate the potential contribution that could be made by their chosen profession.

Source: <http://www.unicef.org/crc/>

Lecture Suggestion 2: Public Policy Advocates

Many of the contemporary concerns described by the authors are being addressed by organizations that advocate for policies aimed at improving the lives of children around the world. Use the internet to obtain information about the current issues being addressed by such organizations as:

- March of Dimes (<https://www.marchofdimes.org/>)

- Children’s Defense Fund (<http://www.childrensdefense.org/>)
- UNICEF (<http://www.unicef.org/>)

Students need to be familiar with the criteria for evaluating websites. They are certain to locate numerous organizations that proclaim to have the “best interest of the child” at heart but that may advocate policies that are self-serving for specific segments of the population.

Lecture Suggestion 3: The Concepts of Development and Interaction

One of the ways in which developmental psychology is distinct from other areas in psychology is its focus on a special kind of behavioral and psychological change. Developmental change is said to be different from other types of change such as learning and maturation.

Give a lecture that explores the nature of developmental change, its causes, and what distinguishes it from other types of change. Although there are different views about what characterizes developmental change, consider these four features: developmental change (a) is orderly, (b) is relatively long lasting, (c) produces something that is new or qualitatively different from what was present earlier, and (d) results in superior functioning. Elaborate and exemplify each of these points with brief descriptions of material that you will cover in the course. Motor development is an excellent vehicle, as are Piaget's theory and material on language development.

After characterizing development, discuss causes of development. Consider these possibilities: (a) heredity, (b) biological maturation, (c) psychological change, and (d) environmental forces. Then address the question of whether any one of these causes is more important than any other. In this context, begin a treatment of the concept of interaction as a way to understand development.

Source:

Csikszentmihalyi, M., & Rathunde, K. (1998). The development of the person: An experiential perspective on the ontogenesis of psychological complexity. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* Volume 1: Theoretical models of human development (5th ed., pp. 625–683). Wiley.

Lecture Suggestion 4: Why Do We Care If Development Is a Function of Nature or Nurture?

Students sometimes have difficulty appreciating why it would be important to distinguish whether certain aspects of development are more a function of nature or nurture. One way to help students understand is to highlight research demonstrating how interventions/environmental conditions do or do not change outcomes for children or adults. Research that highlights the mechanisms of development may influence social policy decisions.

One social program that appears to be making great strides in improving outcomes for children is Early Head Start. Congress created Early Head Start in 1995. The mission of Early Head Start is to improve the intellectual, social, and emotional development of infants and toddlers from low-income households. In fact, Early Head Start is currently the only federal program with this specific aim. Early Head Start attempts to help parents provide high-quality care for themselves and their children and seems to be quite effective.

A recent National Evaluation of Early Head Start concluded that Early Head Start is affecting

children's success in school, family self-sufficiency, and parental knowledge of and involvement in their children's development. Specifically, children enrolled in Early Head Start demonstrated gains in intellectual, social, and emotional development. These children scored higher on standardized measures of cognitive and language development and were less likely to score in the "at-risk" range of developmental outcomes (although it is important to note that these children still scored below the mean of national norms for developmental functioning). Children enrolled in Early Head Start also demonstrated more positive interactions with their parents and were more attentive to and engaged with objects during play than a group of low-income "control" children who were not enrolled in Early Head Start.

The impact of Early Head Start was not exclusive to the children themselves; parents and families were also affected. Parents whose children were enrolled in Early Head Start were more involved with and more supportive of learning than were parents whose children were not enrolled. Early Head Start did not appear to make any difference in income levels for families, but families whose children were enrolled in Early Head Start did participate in more educational and job-training activities.

Early Head Start seemed to affect some of the participants more than others. The program seemed to be especially effective with African American children and their families, although improvements were also seen in Hispanic and White families. Further, child–father interactions were affected more than child–mother interactions. Finally, participants in the Early Head Start program were less likely to give birth within 2 years of their enrollment in the program. Fewer

births mean that there would be more resources (both financial and emotional) available for the current children in the family.

The positive outcomes that are associated with participation in Early Head Start suggest that nurture plays a role in children's and families' lives. Of course, this does not suggest that nature has no effects, but rather that significant improvements can be seen in the lives of children and families who participate in such a program. If these outcomes were determined to be more a function of nature, it would be unlikely for Congress to fund such a huge social initiative.

Understanding the role of nature versus nurture allows policymakers to make informed decisions about which programs are effective and useful and which are not. Unfortunately, despite the research highlighting the effectiveness of Early Head Start, only about 3% of all eligible children and families are currently served by this program. Clearly, understanding the mechanisms of development is not enough.

Source:

Zero to Three (2003, February). The national evaluation of Early Head Start: Early Head Start works. Zero to Three Policy Brief. www.zerotothree.org

Lecture Suggestion 5: The Concept of Stage in Developmental Psychology

The concept of *stage* has long been useful in developmental psychology. It appears in the earliest

developmental theories and continues to be used in modern theories; however, the concept is often misunderstood and misused and is the subject of controversy and debate. For example, Piaget's theory has been criticized on the grounds that cognitive development at all levels proceeds more continuously than his theory suggests. Give a lecture that begins with an overview of the historical uses of the concept of stage. A starting point might be Hall's idea that the stages of development represent various stages of evolution. This can be followed by a brief description of the stages identified by Gesell. These treatments will establish clearly the strongest meanings of the concept and probably also provide clear criticisms of the concept. Next, distinguish various uses of the concept, these might include (1) description, or a handy way to summarize developmental events typical of given points in the life span; (2) metaphor, which chiefly involves applying analogies (which may be misleading) to periods of life ("adolescence is the spring of life"); and (3) genuine theoretical statements, which indicate that there are definite periods of development characterized by the emergence of qualitatively different types of thinking or behaving.

Flavell (1971) states that four criteria are essential to the concept of a developmental stage. Briefly, they are (1) change is qualitative, (2) movement from one stage to the next involves simultaneous changes in multiple aspects of the child's behavior, (3) the transition between stages is rapid once it begins to occur, and (4) the changes (e.g., behavioral and physical changes) that indicate the next stage form a coherent pattern. Finally, give examples of contemporary uses of the stage concept (e.g., Kohlberg's stages of moral reasoning). You may want to draw on various theories of social cognition that extensively use the concept. Other possibilities include stages of motor development, emotional development, or newer theories of cognitive development. If time permits, you may wish to examine the extent to which a particular theory meets or violates Flavell's criteria or exemplifies one of the three ways in which the stage concept is used.

Sources:

- Flavell, J. H. (1971). Stage-related properties of cognitive development. *Cognitive Psychology*, 2, 241–453. [http://dx.doi.org/10.1016/0010-0285\(71\)90025-9](http://dx.doi.org/10.1016/0010-0285(71)90025-9)
- Ross, D. (1972). *Stanley Hall: The psychologist as prophet*. University of Chicago Press.
- Thelen, E., & Adolph, K. E. (1992). Arnold L. Gesell: The paradox of nature and nurture. *Developmental Psychology*, 28, 368–380. <http://dx.doi.org/10.1037/0012-1649.28.3.368>

Lecture Suggestion 6: Applications of Learning Concepts

Although classical learning theories have not figured prominently in developmental accounts of age-related behavioral change, they have contributed greatly to techniques for managing and teaching children and to the scientific study of children's behavior. The concepts of classical and operant conditioning continue to be valuable to teachers and parents and are enjoying a renaissance in educational practice throughout the country.

Lecture on the fundamental concepts of classical and operant conditioning. Spice your treatment liberally with sample applications of the concepts to child management or teaching. Point out how various features of behavioral control are operating even as you speak (the students are sitting in chairs, oriented to the front of the room, writing down what you have presented on overheads—all examples of stimulus control). Students often erroneously define negative reinforcement as punishment. Negative reinforcement occurs when an unpleasant event is removed after a desired behavior, thereby increasing the probability of the behavior occurring again. Differentiate these terms. All reinforcement (positive and negative) increases the likelihood of the behavior recurring. All punishments (positive and negative) decrease the likelihood of the behavior recurring. Note that positive and negative are not referred to in the traditional sense. *Positive* refers to adding a reinforcer such as candy or a punisher such as adding a chore (e.g., washing the dishes), whereas *negative* refers to removing an unpleasant stimulus, such as uncomfortable shoes, to reinforce, or removing a pleasant stimulus, such as a child's toy, to punish. This lecture is most effective if you use multiple examples and if you encourage students to create their own examples.

Lecture Suggestion 7: Understanding Correlational Research

Give a lecture on correlational research because students often misunderstand the important concepts. It is beneficial to provide numerous examples.

Correlation does not equate to causation. For example, exercise is associated with less severe depression; however, it would be a mistake to conclude that exercise causes less severe depression (severely depressed people may not have the energy to exercise). It could be that some third variable affects the other two variables (interacting with others during exercise may affect depression, not exercise per se).

Define *correlational coefficient* (a statistic that provides numerical description of the extent of the relatedness of two variables and the direction of the relationship). Values of this coefficient may range from -1.0 to $+1.0$. Thus, each correlational coefficient indicates the direction of the relationship and the strength of the relationship.

Direction of the relationship: A positive relationship is indicated by a correlation value that falls between 0 and $+1.0$. A positive relationship means that as one variable increases the other variable increases (the more a student studies, the higher their grades). A negative relationship is indicated by a correlation that is between 0 and -1.0 . A negative relationship means that as one variable decreases the other variable decreases (the more television a student watches, the lower their grades).

Strength of the relationship: Zero indicates no relationship between the two variables; they do not vary together. The closer the number is to 0, regardless of the direction of the relationship (positive or negative), the weaker the relationship between the two variables. The closer the number is to 1.0 regardless of the direction of the relationship (positive or negative), the stronger the relationship between the two variables.

Lecture Suggestion 8: Putting Research into Practice

Students sometimes have difficulty understanding why it is important to conduct and review research. Although students enjoy learning about what development entails and how it takes place, they often do not appreciate the role that psychological research plays in this endeavor. A brief discussion of applied developmental psychology may highlight the importance of understanding psychological research and demonstrate how it can be put into practice—in other words, how the literature can be *used* to develop programs that may affect people's lives.

The Society for Research in Child Development (SRCD) frequently releases Social Policy Reports that highlight how research is being applied and used to affect the lives of children. One such Policy Report (Volume XIV, Number 1) discusses how research on adolescence can be used to develop social policy for youth.

Research on adolescents has found that adolescent outcomes are affected by (not surprisingly) families, peers, schools, and communities. The Policy Brief uses acronyms to highlight the most important aspects of each setting that affect adolescents:

TLC in families:

Time

Limit setting, **L**istening, and **L**aughter

Connectedness/**C**aring and **C**ommunication

FRIENDs in peer groups:

Friendship

Resisting negative influences

Interests

Examples of different attitudes and behaviors, and their consequences

Numbers and the dangers of associating with certain numbers

Deviant youth

ABCs in schools:

Appropriate school environment

Behavior of others in the school

Connection to the school, teachers, and other students

WORK in the workplace:

Widen their horizons, especially in terms of helping to develop future careers

Organizational skills

Responsibility

Knowledge

Effective and beneficial youth programs highlight what we know about development in the different aspects of adolescents' lives. Successful programs highlight the TLC in families, FRIENDs in peer groups, ABCs in schools, and WORK in the workplace. Successful programs take the information from the literature and use it to develop youth programs.

Source:

Roth, J., & Brooks-Gunn, J. (2000). What do adolescents need for healthy development?

Implications for youth policy. *Social Policy Report*, Volume XIV, Number 1. Society for Research in Child Development. <http://dx.doi.org/10.1002/j.2379-3988.2000.tb00012.x>

Lecture Suggestion 9: A Note on Qualitative Research

Many studies of adult development rely on qualitative research methods; indeed, much of the chapter material is based on these methods. Now is a good time to clarify the differences between qualitative and quantitative research studies. Given space constraints, this lecture

suggestion focuses on a few points: purpose, method, and reporting style.

Purpose: Qualitative studies are intended to describe a given phenomenon in all its complexity. Quantitative studies, specifically experimental studies, are designed to show a cause-and-effect relationship among a limited number of variables. An elegant experimental design would control all but one or two key variables and demonstrate a clear cause-and-effect relationship. An elegant qualitative study would present a multidimensional description of a complex activity or process but could not relate to cause and effect.

Method: Qualitative methods include in-depth interviews, participant observation, and unobtrusive measures. Researchers are a part of the study, and their task is to develop their skills as a human instrument of data collection and analysis. Because the data collected is primarily people's words and actions, the data are extensive, and the number of subjects studied is usually small. No verification of data collected is required and no qualification is made for personal perceptions. Experimental studies are the archetypal quantitative study. An experimental study contains one group of subjects who receive a treatment (experimental group), while a like group of subjects receives no treatment (control group). The data collected are specific and can often be translated into numbers. The power of a quantitative study often depends on a large number of subjects and replication of the work.

Reporting: Qualitative research projects have thorough descriptions as their central tenet. Quantitative studies are reported in a technical and highly consistent manner, with statistical

levels of significance as an essential part of the study.

There is debate as to the compatibility of qualitative and quantitative studies. Each addresses topics in different ways. One way to understand whether a topic for research might be studied by qualitative or quantitative methods is to make two statements: “I would like to understand more about . . .” versus “I would like to prove that . . .” If you want to understand more about something, a qualitative study might be the approach to take. If you want to prove something, look to a quantitative study.

Source:

Fetterman, D. (1988). *Qualitative approaches to evaluation in education: The silent scientific revolution*. Praeger.

Lecture Suggestion 10: Research on Poverty and Resilience

Child poverty, the primary factor associated with poor nutritional status in the United States, has increased dramatically over the past decade. Many studies have indicated wide-ranging effects of child poverty on development (*Child Poverty*, n.d.). In terms of physical development, children living in poverty have poorer nutrition, less access to preventative and emergency care, and are more vulnerable to poisoning than are other children. Impoverished children are less likely to want to go to school and to communicate with others, are more likely to feel inferior to others,

and are more vulnerable to anxiety and depression than others. According to Ernesto Pollitt, inadequate nutrition is also a major cause of impaired cognitive development and is associated with educational failure among impoverished children (Center on Hunger, Poverty and Nutrition Policy, 1998). While these relationships are recognized by child development specialists, educators, and nutritionists, public policies designed to protect and nurture disadvantaged children have failed to fully take account of this information.

Byron Egeland, Alan Sroufe, and Andrew Collins of the University of Minnesota's Institute of Child Development are working to find ways to help more children succeed despite difficult beginnings in life (2001). These researchers have identified factors that can help parents and educators do more to ensure that children reach a psychologically and emotionally healthy adulthood through their Parent–Child Project, a longitudinal research effort devoted to examining poverty as a risk factor in the development and growth of children and young adults. The project utilized a number of data collection techniques, including individual interviews, family observation, and collection of personal, educational, and work information for all participants, to examine issues such as the causes and consequences of child maltreatment, the quality of attachment between mother and infant, and the effects of risk and protective factors on child functioning, behavior problems, and school failure.

According to Egeland, one of the major factors protecting children from the negative effects of poverty is a good early foundation built on a secure relationship between parent and child. Masten (2001) of the Institute of Child Development agrees that adults who play significant roles

in a child's life at critical times can make an important contribution to resilience. Through her work with homeless families, Cambodian refugees, and children with emotional and behavioral problems, she has come to define resilience as the capacity to "hold onto meaning" or to give the events in one's life an emotional framework that allows an individual to cope more effectively. Says Masten, "I like looking for the things that explain, at least in part, how people are able to turn their lives around. What we're finding is that what helps isn't anything extraordinary. They are ordinary things like spending time with a child who needs a friend. Yet that ordinary action can make an amazing difference. Knowing what has helped particular children gives you some ideas of what to do to help other children."

Sources:

Masten, A. (2001). *Resilience in children*.

Center on Hunger, Poverty and Nutrition Policy. (1998). *Statement on the link between nutrition and cognitive development in children*. Tufts University.

Egeland, B., Sroufe, A., & Collins, A. (2001, August). *The effect of poverty on children's psychological development*.

1.

Lecture Suggestion 11: Research Ethics

Ethics review committees give special attention to studies that intend to utilize children as participants. In addition to obtaining the consent of parents and children, researchers need to gain

permissions from others (e.g., schoolteachers) who may interact with the children during the study, use caution when offering incentives to participants, take care to minimize the potential effects of any deceptive measures on families, and be responsible for discussing with parents any information that may jeopardize the child's well-being (Society for Research in Child Development, 1991).

Given the relative rigorousness of today's ethical standards, students may be interested in a discussion of the treatment of human participants in past research. You can open the discussion with a mention of Stanley Milgram's studies of obedience or the Philip Zimbardo's Stanford Prison Study, as students will probably already be familiar with these cases. Students may then consider the ethical implications of the following studies that utilized children as participants. You may conclude by asking students to consider the benefits and costs of experimental research with children and to suggest guidelines for evaluating the relative advantages and disadvantages of such studies.

Little Albert and the rat. In a study of the classical conditioning of emotional responses, Watson and Rayner (1920) taught a 9-month-old infant named Albert to become afraid of a gentle white rat. At the beginning of the study, Albert was unafraid of the white rat and played freely with the animal. While he was playing with the rat, the experimenters frightened the child by making a loud noise behind him. Albert was startled and began to cry and crawl away. Thereafter, he avoided the rat and would cry whenever it was brought close to him. Moreover, Albert's fear of the white rat had generalized to any

furry object, including a rabbit, a dog, a fur coat, and a Santa Claus mask.

Little Albert's fear response to furry objects persisted for over a month while Little Albert remained in a hospital. Watson and Rayner took steps to “freshen” his responses to the furry objects by pairing them with the loud noise periodically. Little Albert left the hospital before they had a chance to see whether they could decondition his response to furry objects. However, we know from subsequent studies that, unlike other conditioned responses, fear responses do not tend to extinguish.

Self-fulfilling prophecy. Rosenthal and Jacobson (1968) were interested in studying the causes of low educational achievement by Mexican children in U.S. schools. They decided to test the hypothesis that teachers' expectations about their pupils' intellectual ability and their subsequent differential treatment of students led to a self-fulfilling prophecy in students' performance—highly successful students did well because teachers expected them to do well. To test their hypothesis, Rosenthal and Jacobson posed as psychologists who could, on the basis of a sophisticated IQ test, identify children who would in the future display “dramatic intellectual growth.” They administered their test and identified to teachers those pupils who, on the basis of their pseudotest, would subsequently develop greater academic achievements than their peers.

At the end of the year, Rosenthal and Jacobson returned and retested the children. They found that those who had been identified to teachers as possessing academic potential had improved their IQ scores significantly, while the “nonachievers” in the class had not. Unbeknownst to teachers, Rosenthal and Jacobson had selected the names of

these potential achievers at random.

Sources:

Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teachers' expectations and pupils' intellectual development*. Holt, Rinehart and Winston.

Society for Research in Child Development. (1991, updated 2007). *Ethical standards for research with children*. <https://www.srcd.org/about-us/ethical-standards-research>

Watson, J. B., & Rayner, R. (1920). Conditioned emotional reactions. *Journal of Experimental Psychology*, 3(1), 1–14. <http://dx.doi.org/10.1037/h0069608>

CLASSROOM ACTIVITIES

Classroom Activity 1: Children's Rights

Divide the class into informal learning groups to research the issues surrounding the ratification of the *Convention on the Rights of the Child*.

- Each group should focus on one or two of the articles. One group might wish to address one of the two optional protocols that deal with:
 - Involvement of children in armed conflict
 - Sale of children, child prostitution, and child pornography

- Give groups a few minutes of class time to meet and plan how to present their findings to classmates in a 1-min summary of their topic.
- On presentation day, groups should present a 1-min visual or audio representation of the specific right they have researched. Of course, the length of time the instructor wishes to give each group is flexible. However, experience indicates that students are better at attending to short, succinct presentations.
- Each group should prepare a half-page summary of findings to turn in to the instructor.
- Each group should prepare a 1-min (time is instructor's choice) presentation in which they can make an oral report or use audio/visual tools to give a quick overview of the right(s) they researched. Students may need some coaching on presentation skills. Have all members of the team come to the front of the room and stand together as a team. The team leader should introduce each member of the team and describe which "right" they researched. The team reporter then presents the summary. Other team members can assist with any audio/visual needs.
- Students in the audience need to be held responsible for listening to all presentations. This can be done by requiring them to prepare a list of "rights" presented. If students are not given some assignment that requires them to process classmates' reports, they are less likely to maintain attention.
- After all groups have presented, have each student work with a partner in class to discuss their responses and to create a list of what they believe to be five (or three) rights that should be given the highest priority by all governments. Each set of working partners should submit their individual lists and their combined priority list to the instructor. It is

probably best not to grade the student responses, but you can give them a quick review and record participation for each assignment that is complete. This is a good way to check attendance and to offer participation credit.

- An excellent resource is the UNICEF website called “Convention on the Rights of the Child” at <http://www.unicef.org/crc/>

Classroom Activity 2: Historical Documents

The internet has a number of sources for locating and reading historical documents. For example, Project Gutenberg at <http://www.gutenberg.org> contains books that are now in public domain and are freely available online. Suggest that students peruse some of the original books written by the authors cited in the textbook. Here are some books that are related to Chapter 1.

- Sigmund Freud:
 - *Dream Psychology*
 - *Psychoanalysis for Beginners*
 - *Three Contributions to the Theory of Sex*
 - *A Young Girl's Diary*
- Jean Jacques Rousseau: *Emile*
- John Locke: *An Essay Concerning Humane Understanding, Volume I*
- G. Stanley Hall: *Youth: Its Education, Regimen, and Hygiene*

Assign one book to each group of four students to peruse online or to download and peruse. It should not be necessary for them to read the entire book to get a good feel of the gist of its general approach. Allow 10 min or so during class for groups to meet and (a) discuss their own reactions to the book and (b) prepare a 1- or 2-min presentation to share with the class. The presentation should include the following:

- Author and title of the book
- Statement of the period of history in which the book was written
- Statement of the overall orientation of the book
- Reactions of surprise, agreement, or disagreement
- Any questions that the book raised for them

Classroom Activity 3: Sampling Bias

Present the following situations:

- Teenage males at a local tavern, the beach, and the baseball park were surveyed about their driving records and habits. The results led researchers to some interesting conclusions about male adolescent driving abilities and habits.
- Parents at a PTA meeting were interviewed about the quality of the public school system.
- An internet survey assessed a community's attitudes toward welfare recipients.
- The older adult population of Palm Springs was sampled on the advantages and

disadvantages of being old.

Source:

Simons, J. A., Irwin, D. B., & Drinnin, B. A. (1987). Instructor's manual to accompany *psychology, the search for understanding*. West Publishing.

Classroom Activity 4: Partners Discussion: Use of Unethical Research

Share the following information about unethical research conducted by Nazi doctors during World War II. Ask each student to talk with a partner for a limited time (2 or 3 min) in order to answer the three questions listed below. Students should record their answers on a paper to be handed in at the end of class. After the partners have recorded their answers, ask for three (not more) students to share their responses.

During World War II, some Nazi doctors performed cruel, mutilating experiments on Jews, Gypsies, Poles, and other political prisoners. In one study, men were immersed in ice water for 5 hr while physicians recorded their body temperature, respiration rates, pulse rates, and urine and blood contents. Many of the subjects in this study died during the course of this highly unethical experiment. However, results from this particular study have since been used to better understand hypothermia and how long accident victims can survive in cold water.

Questions for partners to answer:

- Does using these data allow something good to come from horrible experimentation?
- Or, does using these data condone the original studies?
- Is it ethical to use the results of unethical research?

Source:

Simons, J. A., Irwin, D. B., & Drinnin, B. A. (1987). Instructor's manual to accompany. In *Psychology, the search for understanding* (pp. 56–57). West Publishing.

Classroom Activity 5: Draw on the Arts

The *arts*, broadly defined, include drawing, painting, sculpture, music, dance, poetry, and writing, to name but a few. Both art products and art processes can be used in university teaching.

- Existing artistic products can be used to illustrate facts and ideas.
- The process of creating can be used to express feelings or reactions to information presented.
- Creative expression activities can be used to envision possible worlds, including possible research, possible public policies, possible human service projects, and possible changes in social institutions.
- Suggestion for art: Erik Erikson's wife and collaborator in the development of his

theory wove a tapestry of a spectrum of colors that illustrated the epigenetic theory of psychosocial development. The yarns going in one direction illustrated the continuity of life from beginning to end and yarns going in the other direction represented the psychosocial issues (trust, autonomy, etc.). Therefore, the tapestry illustrated how all of the psychosocial issues are present in some form throughout life.

- Ask students to work in groups to create some work (drawing, sculpture, and collage) that will illustrate the theories of Erikson, Freud, Bronfenbrenner, or others mentioned in the text.
- Suggestion for using music: Erikson described how older persons with integrity come to be able to relate to young children more playfully. The term *life cycle* is sometimes used to describe development that comes “full circle” at the end. One piece of music that might be used to illustrate this concept is Harry Chapin’s “Cats in the Cradle” and “Life Is a Circle.” Consider reviewing the music and lyrics and allowing students to discuss how Erikson’s stages might be described as a circle.
- Suggestion for a scavenger hunt: Ask students to search for creative works such as art, sculpture, music, literature, poetry, or drama to illustrate the various theories described in Chapter 1. Assign different topics to different groups and give them class time to assemble and compare their artifacts before presenting them as a group to the whole class.

Classroom Activity 6: Bettelheim’s Psychoanalytic View

In preparation for this class activity, obtain from the library and read Bruno Bettelheim's fascinating psychoanalysis of fairy tales in the book titled *The Uses of Enchantment: The Meaning and Importance of Fairy Tales*. Create overheads with some of the main points.

Bettelheim postulated that young children benefit unconsciously and vicariously from hearing the stories. He believed, for example, that the "mean old woman," the "wicked witch," or the "stepmother" provided an unconscious replacement of the real mother whom the female child would like to be rid of during the period of the Oedipal complex. Likewise, in *Jack and the Beanstalk*, was the giant an unconscious stand-in for the father that was so large and threatening to the young boy in the Oedipal phase? Was "sleep" for *Snow White* and *Sleeping Beauty* really latency (sexual sleep), which could only be broken by the kiss of a charming prince?

For in-class use, find some children's books containing nicely illustrated short versions of traditional fairy tales such as *Jack and the Beanstalk*, *Sleeping Beauty*, and *Snow White*. Take a few minutes to read the book aloud (or ask someone in the class to do this), pausing to show the illustrations. Then have a class discussion on the plausibility that Bettelheim's insights reflect the unconscious sexual impulses present in the preschool years.

Another variation on this activity would be to present Bettelheim's hypotheses and then divide the class into groups with each group of four students analyzing a different book according to the psychoanalytic framework. Then ask them to suggest how the book might be analyzed if one

were working from another theory such as behaviorism or social cognitive theory. What might be the cognitive value of tales like *Goldilocks and the Three Bears* (hint: seriation of size in Piaget's theory)?

Source:

Bettelheim, B. (1976). *The uses of enchantment: The meaning and importance of fairy tales*.

Knopf.

Classroom Activity 7: Ice Breaker

This activity is intended to “break the ice” and to introduce various concepts that will be presented throughout the course. During the first-class meeting, have the students draw a picture of a memory from childhood. This picture can be of anything related to their childhood (e.g., getting ice cream with Dad at the beach, or hitting baby brother over the head with a stuffed animal). Solicit volunteers to show and describe their pictures and attempt to relate those topics to theories and/or concepts that will be covered during the term.

Logistics:

- Materials: One piece of paper per student, and enough crayons so each student has one
- Group size: Individual, then full class
- Approximate time: 5 min for individual drawings, then 10–15 min for full-class discussion

Classroom Activity 8: Theoretical Perspectives Influence Observations

Divide the class into small discussion groups to consider the following questions: How does one’s theoretical view of development affect the kinds of behaviors one notices? What behaviors would be observed by Freud, Piaget, an information-processing theorist, Skinner, Bandura, an ethological theorist, and Bronfenbrenner when watching two children interact on a playground?

Option 1: Have each group discuss each theory.

Option 2: Have each group address one theory.

Ask each group to nominate someone to write down the results of the discussion. The summary of each group's comments can be the basis for a general class discussion regarding the similarities and differences among the major theories of life-span development.

Logistics:

- Group size: Small groups (two to four) and then full class for a larger discussion
- Approximate time: Option 1, 30 min for small groups, then 30–40 min for full-class discussion; Option 2, 5 min for small groups, then 30–40 min for full-class discussion

Source:

King, M. B., & Clark, D. E. (1990). *Instructor's manual to accompany Children*. Brown.

Classroom Activity 9: Theoretical Perspectives

This project introduces various theoretical perspectives and allows students to realize how much of the material they already know. What students offer will depend on how many psychology courses they have had previous to this course, and their retention after reading the chapter. As an

instructor, you will learn which theoretical perspectives need the most class coverage, what misconceptions the students have, and what strengths they have coming into the course. On the blackboard, list each of the following perspectives (you may use fewer, or modify labels, to fit how you cover the course material), leaving room below each to add comments. Then have students contribute terms, ideas, and “great psychologists” associated with each. By the end of the exercise, they will be able to see some similarities and dissimilarities for each group.

Here is an example of this exercise from one class:

- PSYCHOANALYTIC: Freud, id, ego, superego, sex, early childhood, Erikson, unconscious, defense mechanisms, psychosocial stages, and psychosexual stages
- BEHAVIORAL/SOCIAL LEARNING: Skinner, Pavlov, reinforcement, punishment, imitation, Bandura, classical conditioning, operant conditioning, modeling, and observational learning
- ETHOLOGICAL: Lorenz, imprinting, critical period, Bowlby, sensitive period, attachment, careful observations
- COGNITIVE: Piaget, Vygotsky, memory, information-processing theory, adapt, stages of cognitive development, operations, situated, and collaborative
- ECOLOGICAL: environment, culture, ethnicity, Bronfenbrenner, microsystem, mesosystem, exosystem, macrosystem, chronosystem, and gender

Logistics:

- Group size: Full-class discussion

- Approximate time: 45 min for full-class discussion

Source:

Irwin, D. B., & Simons, J. A. (1984). *Theoretical perspectives class activity*. Des Moines Area Community College.

Classroom Activity 10: Critical Analysis of Theories Using Developmental Themes

We are never quite sure that students have grasped the basic components of developmental theories or that they know how the theories are the same and how they differ. To check their understanding and their ability to discriminate, list several theories and theorists down one side of a piece of paper and the distinguishing characteristics of the theories across the top of the paper. Characteristics that could be used to discriminate between the theories include whether development is deterministic, biology versus environment, stability versus change, whether there are critical periods for different aspects of development, whether culture plays a role in development (cultural universal or cultural relativism), and the role of the participant in development (active or passive). The students' task is to indicate where each theorist or theory stands on each of the characteristics and to provide an explanation for their answers. Emphasize that the reasoning behind their decisions is the primary focus. Students find the activity difficult; however, answers to essay questions about the theories show that they seem to learn a lot from the exercise.

Logistics:

- Group size: Small groups (two to four), and then full-class discussion
- Approximate time: 30 min for small groups, and then 30 min for full-class discussion

Classroom Activity 11: Psychological Theories and Methods and Everyday Information

This activity helps students to see the relationship between psychological theories and methods and everyday reading material and information. One week before you want to use this activity in class, have students find two or three articles on human development from *Parenting* or other popular magazines. They should bring the magazine issue or copies of the specific articles to class. Have the students get into small groups to discuss their answers to the following questions: Who is the audience for the article (e.g., parents, teachers, adolescents)? What is the topic of the article? What are some examples of information provided? Does the article emphasize heredity (nature) or environment (nurture)? What theoretical perspective does the author seem to use (e.g., psychoanalytic, behavioral, humanistic, biological, cognitive, ecological)? Does the article rely on scientific findings, expert opinion, or case example? Do the conclusions of the articles seem valid?

For the following questions, consider all of the magazine articles that your group has collected. Which theoretical perspectives seem to be most popular with these magazines? What topics are getting the most coverage in the magazines? Are most articles well written and useful?

Logistics:

- Materials: Students must gather popular magazine articles.
- Group size: Individual, small group, and full-class discussion

- Approximate time: Individual (1 hr), small group (15 min), and full-class discussion (30 min). To go even further, demonstrate how a write-up of this study would conform to the standard professional journal format.

Source:

Simons, J. A. (1990). *Evaluating psychological value of magazine articles*. Psychological Services.

Classroom Activity 12: Exploring Physiological Measures

This activity increases students' familiarity with physiological measures. Find examples of physiological measures in the literature (or perhaps online). Bring copies of the methodology and have students read the examples and discuss their perceptions of the physiological measures. Perhaps have students brainstorm about whether they believe that the physiological measures are true indicators of psychological phenomenon.

There are a few variants on this activity. One is to bring in examples of research studies that employ physiological measures and examples of studies that do not, and have students identify which is which. A second is to have students explore the literature or the web on their own and share their findings with the rest of the class. A third is to have students brainstorm about physiological measures that could be used in psychological research, and what psychological

phenomenon they believe such measures would evaluate (this could lead into a discussion of operational definitions).

Classroom Activity 13: Design an Experiment

This activity takes students step-by-step through the basic processes of designing a research experiment. Given the numerous new concepts (such as independent and dependent variables, random selection), the most effective way for students to understand what they are, and how they are used, is to see them implemented.

Choose a basic study, such as “Does watching violent television increase aggressive behavior in children?” Begin by identifying the independent variables (What will your “violent” show be? Might you include a passive, nonviolent show, too? Will there be a control group who watches nothing?) and dependent variables (How are you going to measure “aggression”? Determining both this and what constitutes a “violent” program should prompt an explanation of operationalizing.). Determine the age of subjects you wish to study (have students determine this and explain *why* they think that is a valid and/or useful age-group to focus on).

Go through the process of how and where you might obtain subjects, and how you will assign them to the various groups. Develop a procedure for carrying out the experiment—where they will watch the show and what they will do after the show, so that you may observe behavior to assess aggressiveness (e.g., playground, room with toys, problem-solving activity). Consider if the study needs to be blind or double blind and the importance and logistics of both. Then create some results, and discuss possible interpretations, making sure to include consideration of any confounds or methodological limitations. To go even further, demonstrate how a write-up of this

study would conform to the standard professional journal format.

Classroom Activity 14: Identifying Research Methodology

Students sometimes seem to be bored during a lecture discussing the various methods and designs utilized in psychological research. Taking a constructivist perspective, it may be useful to have students engage in an activity that forces them to extract information about the various research methods from their text and use it to answer questions about fictitious research examples.

Before beginning a lecture on research methodology, highlight the importance of understanding the various techniques (e.g., it promotes critical thinking—by understanding the methodology employed in a specific study, you have an enlightened understanding of the findings, whether you agree with the authors’ interpretations, etc.) and then hand out the Identifying Research Methodology handout (**Handout CA 1-14**).

Have students work in small groups to answer the various questions. Walk around the room and facilitate students’ construction of knowledge and then meet as an entire class to go over the answers. As you discuss the answers to each of the questions, go into more detail about the various research methods and designs, their strengths and weaknesses, and so on.

Logistics:

- Materials: Handout CA 1-14 (Identifying Research Methodology)
- Group size: Small groups (three to four students) at first, followed by full-class discussion
- Approximate time: 20–25 min for small groups, 30–45 min for full-class discussion/lecture

DISCUSSION BOARD PROMPTS

For each chapter, a few discussion board prompts are provided. Some of these prompts may be controversial, but all should encourage the student to further process course material. Although these are intended for online discussions, they could easily be used for an in-class discussion.

1. Think of a social policy issue that has been in the news lately. How can an understanding of human development inform legislators as to how to approach this issue?
2. Discuss some important history-graded influences that have impacted both your development and your cohort's development. How have these history-graded influences made your generation unique?

CLASSROOM DISCUSSION QUESTIONS

These questions can be utilized in the classroom with a partner or small group. They can be used as an introduction to the topic or as questions to start class discussions.

1. After discussing the issue of nature versus nurture, ask students what is more important nature or nurture? Why? How do you know one is more important?

2. With a partner, ask students to follow the steps of scientific method and design a brief experiment about a topic in developmental psychology.
3. After discussing and reviewing positive and negative correlations, ask students to work with a partner to provide an example for each concept (one for positive correlation and one for negative correlation) from their own lives.

RESEARCH PROJECTS

Research Project 1: Monitoring Contemporary Concerns in the Media

Chapter 1 of *Children* indicates that significant contemporary concerns in child development are changes in the family, educational reform, and sociocultural issues such as gender roles and ethnic minorities. Monitor major news media outlets for a week and keep a record of stories that reflect each of these concerns. When you are done, tally the number of stories that reflect each concern. Then write a brief report in which you answer the following questions.

Questions:

1. What was the most frequently expressed concern?
2. Were the concerns you encountered in each category focused on one particular kind of story? Or were there a number of different kinds of news items that reflected a variety of

concerns within each category? Explain your answer.

3. Did the stories reflect a developmental perspective? Or did they reflect some other way of viewing the contemporary concerns about children? Explain your answer.

4. Can you find information in *Children* which is related to each story and which helps you to understand it better? Explain your answer.
5. What information do you wish you had in order to understand the story better?

Use in the Classroom:

Poll the class on their answers to the questions. Find out what the dominant concerns are, what kinds of stories express these concerns, and whether the stories are examples of a developmental perspective.

To introduce the importance of rigorous, systematic enquiry as a means of understanding development, you may find it useful to contrast media presentations with textbook presentations. Have students compare and contrast topics they have found in the media with how the topic is presented in the text.

Research Project 2: Identifying the Developmental Issues in a Research Report

The knowledge that forms the basis of your textbook is largely found in research reports published in professional journals. Although *Children* provides you with encyclopedic coverage of many topics, you will benefit a great deal by trying to “go to the source” for information about as many topics as your time and interest allow.

Have students find a research report in a journal (e.g., *Child Development*, *Developmental Psychology*, *Family Therapy*, *Journal of Marriage and the Family*, *Family Relations*, *Early Childhood Research Quarterly*) on a topic that interests them. They are to write a report on what they find. Ask them to attach a copy of the first page of the research article (include the abstract, which briefly summarizes the entire article) to their report.

In addition to including the main points of the study and its findings, they should answer the following questions.

Questions:

1. Does the article address the idea that today is an “easy” or a “difficult” time to be a child?
2. Does the article reinforce or help correct a stereotype about children and adolescents?

Explain your answer.

3. Does the article contribute to our understanding of the complexity of child and adolescent development and sociocultural contexts? Explain your answer.
4. Which aspects of the nature of development does the article address? For example, is the research about cognitive, social, or biological processes? One or more periods of development? Does the article address such issues as maturation and experience, continuity and discontinuity, stability and change? Explain your answers.

Use in the Classroom:

1. Form cooperative groups with about four students per group. Either assign groups or let them choose with whom they work. Most college students can form groups in less than a minute. You might want to consider forming groups that will work together each time

- you ask them to “Get into your groups.”
2. Using cooperative learning principles, each member of the group should have a specific role to play. This prevents one looking on while others work. Have one who leads the discussion, one who records, one who will share the results with the class, and one who serves as a timekeeper and/or checks over the written record that will be turned in with the names of the group participants.
 3. Give the groups a specified amount of time (about 5 min) to share their results with each other.
 4. Have students discuss their answers to the four questions to discover what themes are widely present in the child development literature.
 5. The recorder will compile a record of each person’s contribution.

This activity can be used to check attendance and/or to give credit for class participation.

It is not necessary (or even recommended) that this exercise be graded. It is recommended for active participation and discussion.

Research Project 3: Journal Article Critique

Part of conducting psychological research is reviewing and understanding published research studies. In this research project, you will choose one of the topics that will be covered in this course (e.g., play, gender roles, moral development, effects of television) and find a research report in a journal (e.g., *Adolescence*, *Child Development*, *Developmental Psychology*, *Early Childhood Research Quarterly*, *Family Therapy*, *Journal of Marriage and the Family*) on the chosen topic. Read the article and write a report about it. Enclose a copy of the first page of the research article (include the abstract that briefly summarizes the entire research study) with your report. In addition to including the main points of the study, give your personal reactions to the research findings.

Questions:

1. Can you use the title of the study to identify the independent and dependent variables?
(Many titles are in this format: “The effects of IV on the DV.”)
2. What did you learn from the introduction section? What is the historical background of the research topic? Which earlier research findings are given as most relevant to this study? What theoretical explanations are emphasized in this section? What is the hypothesis of the present study?
3. What did you learn from the methods section? Who were the subjects? What procedures (e.g., apparatus, directions, and assessment tools) were used?
4. What did you learn from the results section? What kinds of statistical procedures were used? What did you learn from charts, frequency tables, and bar graphs? What results did the authors say were statistically significant?
5. What did you learn from the discussion section? How did the authors interpret their results? Did they provide alternative explanations? Did they talk about the limitations of the present research study? What future research studies were suggested?
6. What kinds of ideas did this article make you think about? Can you design a similar study on this topic?

Use in the Classroom:

Possible modifications of project: (1) assign specific articles to students, (2) have students choose articles all on one topic, (3) have students choose articles from only one journal, (4) have students read two different articles on the same topic, or (5) have students read research articles

that address a current social issue (e.g., abortion, teenage pregnancy, racial prejudice), and decide what the research findings would suggest for social policy.

Have students compare journal reading to (1) textbook reading and (2) magazine reading. Which sections were difficult to understand? Which sections of their articles were comprehended? How did the article compare to their expectations?

Were their articles based on basic or applied research? What did the students see as the value of their articles?

Research Project 4: Answering Questions About Development

This research project asks students to conduct research on a topic they find interesting in developmental psychology (**Handout RP 1-4**). On the first day of class, have students write down one or two questions they would like to have answered by the end of this course.

Presumably, they are interested in at least one aspect of child development about which they have specific questions they would like to have answered (e.g., Does bilingualism influence cognitive development?). This will involve going to the library and finding at least 10 relevant journal articles. Over the course of the semester, have the students investigate the topic and write a brief report that incorporates the following questions:

- What is the question you are investigating?

- Why is this question interesting to you?
- How did you determine the answer to your question?
- Describe the information you located to address your question.
- What new questions has this new information stimulated?

Use in the Classroom:

Two options exist for incorporating this assignment. First, you can have students present the question they researched and the results of their investigation. If possible, organize these presentations so that students present their questions when you are discussing the chapter that is most relevant to their topic. A second option for incorporating this research project is to ask each student to answer the question they researched as part of their final exam. This will mean that each student will be answering a different question on the final exam.

Research Project 5: Validating Beliefs With Psychological Literature

Break the class down into small groups (two to three students). Have each group choose one belief/opinion that they would like to research. You could choose to have all of the groups research the same topic (and could then discuss how different groups found different resources, if that is the case) or different topics. Then, take the groups to the library. Have students search the psychological literature to validate the chosen opinion. You could also then have the groups search the internet for information pertaining to the belief. This activity should strengthen

students' critical thinking skills, knowledge of the psychological literature, and their library skills.

Use in the Classroom:

Have the groups report to the class as a whole what they found in the psychological literature and on the internet. Discussion should involve whether the belief/opinion was validated by the empirical literature and whether this information was represented accurately on the Internet.

Research Project 6: Using the Literature to Develop an Argument

This research project can be used to strengthen students' library skills, critical thinking and analytical skills, and knowledge of the psychological literature. Break the class down into three groups: one group will argue for a social program, one group will argue against a social program, and one group will serve as a board of policymakers/politicians deciding on whether or not to fund a particular social program.

Students will be asked to research a particular social program (e.g., Head Start) in the empirical literature. Students who are arguing for the program should argue that the program produces positive outcomes and thus should receive funding from the board (e.g., Head Start programs have been shown to improve intellectual, social, and emotional functioning in underprivileged children; thus, we are asking you to provide funding for this program. These students are therefore adopting [whether they know it or not] a nurture perspective), whereas the students who are arguing against the program should argue that the program has limited success because the measured outcomes are barely affected (e.g., intelligence has been shown to have such a

strong biological underpinning that the educational programming of Head Start does little to affect child outcomes in this domain, at least not enough to warrant further funding from your board/organization. These students are therefore adopting a nature perspective). The students on the “board” will hear arguments from both “sides” and will render a decision on whether to provide funding for the program.

Use in the Classroom:

You can stage a debate in the classroom and highlight how students are using the empirical literature to validate and create an argument in favor of/against a social policy. You can decide whether to identify that this is truly a nature/nurture debate before or after the activity. In other words, you can use this information to help students design their arguments or can hear the arguments first and then use them to highlight how the students adopted a nature/nurture stance perhaps without even realizing it. You can also use this debate to highlight how the psychological literature can be put into practice—that is, how research is used to shape social policy. Of course, the students on the “board” will benefit from researching the literature as well, so it would be good to give them a library-based assignment, but one that is unrelated to the argument for/against the social program (thus, to not bias their decision).

Research Project 7: Parent–Child Interaction

In this project, students will observe a parent–child interaction and interpret it according to

psychoanalytic, behavioral, and cognitive theoretical approaches. They should go to a local supermarket and watch a mother or father shop with a 2- to 4-year-old child. They should describe the interactions they observe, including the child's demands, verbal exchanges between parent and child, and ways in which the parent responds to the child's demands. Then have students answer the questions on **Handout (RP 1-7)**.

- On what would a psychoanalytic theorist focus in this example? How would the sequence of observed events be explained?
- How would a behavioral psychologist analyze the situation? What reinforcers or punishers characterized the interaction? Did specific things occur that would make a behavior more likely to occur in the future? Less likely to occur?
- On what would a cognitive theorist focus in this situation? Why?
- What is the child learning in this situation? What does the child already know?

Use in the Classroom:

Have several students present their observations to the class. Are there commonalities to the observations or is each unique? How would the various theories interpret aspects of the interactions? Do some of the interpretations seem more comprehensive than others? Do some of the interpretations seem more reasonable than others?

Research Project 8: Using the Literature to Identify Research Methodology

This research project asks students to review the literature (and thus to exercise their library research skills) and find examples of research studies that employ different research designs. Have students go to the library and use a psychological database such as PsychINFO to find examples of research studies that employ the following:

- | | |
|------------------------------|----------------------------|
| (1) Naturalistic observation | (5) Standardized test |
| (2) Laboratory observation | (6) Physiological measures |
| (3) Survey | (7) Case study |
| (4) Interview | (8) Life-history record |

Students can also be asked to find examples of correlational, experimental, cross-sectional, longitudinal, and/or sequential designs.

Use in the Classroom:

Students can work individually or in small groups and should be able to report and explain their findings to the rest of the class. One variant would be to have students/groups briefly explain the research study they found and have the remainder of the class attempt to identify the research methodology.

FILM AND VIDEO LIST

The following films and videos supplement the content of Chapter 1. Please note that some of the video descriptions are quoted from the publisher's/distributor's description.

Bandura's Social Cognitive Theory: An Introduction (Insight Media, 2003, 30 min). Using archival materials, new visuals, and narration by Bandura, this DVD explores Bandura's innovative methods. It looks at his early Bobo doll experiments, his work with phobias, and his work on self-efficacy.

Ben and Damien: Observing Child Development (Films for the Humanities and Sciences, 1999, 40 min). The work of the Tavistock Clinic is firmly rooted in the belief that childhood holds the key to adult behavior. With that in mind, infant observation is a key part of training for trainee therapists. This program follows two ordinary families undergoing observation of their infants—newborn Damien and toddler Ben—to examine the growth of relationships between adults and children. As one Tavistock doctor explains, “It doesn't seem very scientific, but actually what infant observation is all about is the study of love.”

Child Development (Insight Media, 1992, 30 min). This is a historical overview of contributions from Locke to modern theorists. It stresses the idea of interaction and deals with research methods of the field.

Classical and Operant Conditioning (Films for the Humanities and Sciences, 1996, 56 min). This program explains the nature of behavioral theory and its application to education, parenting,

and therapy.

Cognitive Development (Insight Media, 1990, 30 min). This video focuses on Piaget's stage theory of cognitive development and criticisms of that theory. In addition, it examines development of thought, reasoning, memory, and language.

The Critical Issues: Obedience and Ethics (Insight Media, 2000, 30 min). Using the example of proposed student research into school bullying, this program discusses Milgram's obedience experiments, addresses the ethics of consent and deception, and questions whether ethical concerns are preventing important research.

Development and Diversity (Insight Media, 1992, 30 min). This video explores historical and cultural definitions of childhood and probes the prolongations of infancy and childhood. In addition, there is an emphasis on children in different cultures.

Different Strokes: Nurture and Human Diversity (Insight Media, 2006, 30 min). Exploring the ways in which nature and nurture affect such aspects of being as personality, this program examines the influences of the prenatal environment, peer groups, and culture on human development. It considers differences in White, Latino, Asian, and African American cultures.

Discovering the Human Brain: New Pathways to Neuroscience (Insight Media, 2006, 30 min). This DVD provides insight on the utilization of MRIs, PETs, EEGs, brain injuries, and autopsies

in research.

The Ecology of Development (Insight Media, 1992, 30 min). This video profiles children of 12 families in five countries to illustrate the influence of family, peers, school, culture, and history on development. In addition, terms from Bronfenbrenner's ecological theory are defined.

Erik Erikson: A Life's Work (Insight Media, 1992, 38 min). This program uses biography and interviews to introduce Erikson's theory.

Evolving Concern: Protection for Human Subjects (National Library of Medicine, 1986, no time given). This video uses historical events to demonstrate why protection for human subjects is necessary and important.

The Family of Chimps (Filmmakers Library, 1987, 55 min). This video focuses on a study by ethologist Frans de Waal at the Arnhem Zoo in Holland and explores issues of comparative psychology and the ethics of animal research.

Further Approaches to Learning (Films for the Humanities and Sciences, 1996, 57 min). This program covers approaches to learning beyond classical and operant conditioning. Some of the approaches covered include social learning theory, ethology, and neuroscience.

History & Trends (Magna Systems, Inc., 1997, 28 min). This film focuses on child development but does a good job on covering the early philosophies, beliefs about human nature, the nature-nurture issue, and how the scientific method is used in studying child development.

How to Read and Understand a Research Study (Insight Media, 2008, 24 min). This DVD teaches how to understand research studies and evaluate the quality of information presented in a research study. It outlines the structure of a scientific paper, including abstract, introduction, methods, results, discussion, acknowledgements, and literature cited; differentiates among such research types as observational studies, true experiments, and quasi-experiments; and explains how to evaluate the quality of a study design. The program features interviews with experts, vignettes, and examples, and defines key terms, including *hypothesis*, *random assignment*, *reliability*, *validity*, and *p value*.

How We Study Children: Observation and Experimentation (Films for the Humanities and Sciences, 1994, 25 min). This program asserts that the testing of a causal hypothesis involving cognitive development is best done through a combination of observational and experimental methods. Kathy Sylva and Peter Bryant and other researchers share their insights into categorizing and codifying patterns of play through observation, avoiding common experiment-related pitfalls such as covariation and unintentional bias, and mitigating artificiality, a challenge to practitioners of both approaches.

Icons of Science: Mind and Brain (Insight Media, 2006, 20 min). Tracing the historical development of ideas about the brain, this program explores the possibility that the brain is like a computer and considers whether the mind is distinct from the brain.

Integrity in Scientific Research (Insight Media, 2002, 43 min). This set of five videos covers topics related to ethics in scientific research. It looks at intellectual property issues and competition between scientists. This set examines the consequences of industrial support for sharing data and resources and discusses issues related to authorship and reporting suspected research misconduct.

Learning (Insight Media, 1990, 30 min). This video presents information about classical and operant conditioning, with a special focus on using operant conditioning to help hyperactive children.

Nature/Nurture (Indiana University, 1986, 52 min). Acquired and inherited characteristics, results of twin studies, and environmental influences on behavior are illustrated in this video.

Observation (Magna Systems, Inc., 1993/2004, 29 min). This film demonstrates how naturalistic observation contributes to our knowledge of child development.

Qualitative Research: Methods in the Social Sciences (Insight Media, 2006, 20 min). This DVD introduces qualitative research and considers the problems of validity in the process, protocols,

and analysis of qualitative research. It examines such forms of qualitative textual analysis as rhetorical criticism, conversation analysis, and content analysis.

Quantitative Research: Methods in the Social Sciences (Insight Media, 2006, 20 min). This program introduces quantitative research. It examines such measurement issues as validity, sampling, and distribution; discusses experimental design and statistical analysis; and covers survey design, scales of measure, sampling procedures, and data analysis.

Research Design (Insight Media, 2003, 103 min). This set of three videos shows how to conduct research studies. It covers developing a question, reviewing the literature, and planning a study. The program examines quantitative, qualitative, and mixed methodologies of data collection and looks at data analysis.

Research Ethics (Insight Media, 2008, 21 min). Featuring vignettes that follow students devising a research proposal, this entertaining program examines ethical issues in reporting and conducting research. It defines and offers examples of such reporting issues as plagiarism, credits and citations, and falsification and fabrication of data, and teaches how to identify and avoid breaches in reporting research ethics. The DVD explores ethical issues in research conduct, including acceptable uses of animals in scientific research and such issues surrounding human research subjects as obtaining informed consent, gaining assent from subjects under the age of 18, instances in which research may violate informed consent, assurance of freedom from harm, the use of debriefing, and maintenance of confidentiality. It also discusses conflicts of

interest and outlines methods used to minimize and manage potential conflicts of interest. The program features Kathleen M. Schiaffino and Harold Takooshian, both from Fordham University.

Research Methods for the Social Sciences (Insight Media, 1995, 33 min). This video covers types of experimental designs and their uses and deals with basic features of experiments as well as clinical, correlational, and field methods. In addition, it lays out the seven steps of the scientific method, interpretation of data, and ethical issues.

Research Methods in Psychology (Insight Media, 2001, 30 min). This video questions whether or not it is possible to test for a causal link between video games and violence. It defines and discusses the application of the scientific method to psychological research and describes the tactics and limitations of descriptive, correlational, and experimental research methodologies.

Statistics: Decisions through Data, Part 1 (Insight Media, 1992, 3 volumes, 60 min each). Basic descriptive statistics, their calculation, and various graphing methods are presented. Graphics and animation are used to integrate real examples.

Statistics: Decisions through Data, Part 2 (Insight Media, 1992, 2 volumes, 60 min each). Experimental design is presented with a discussion of causation and sampling. It also deals with confidence intervals and statistical significance.

Survey Savvy: Planning and Conducting a Successful Survey (Insight Media, 2002, 24 min). This program presents a basic framework for preparing, carrying out, and reporting the results of a survey. It looks at setting objectives, choosing survey methodology, selecting a sample, analyzing data, and writing a report. The program defines such concepts as qualitative and quantitative research and open and closed questions.

Theories of Development (Magna Systems, Inc., 1997, 27 min). This film gives an overview of the following theories: cognitive, psychoanalytic (Freud and Erikson), behavioral, social learning, and sociocultural.

Theories of Development (Insight Media, 1997, 29 min). This program summarizes the cognitive, psychosexual, psychosocial, behaviorist, social learning, and sociocultural theories of human development, profiling the work of Piaget, Freud, Erikson, Gesell, Skinner, and Vygotsky.

Theories of Development 2 (Insight Media, 2007, 17 min). Featuring classroom footage, interviews with experts, and historical accounts, this program explores theories of development and examines their impacts on education. It explores the ideas of Locke, Rousseau, Pestalozzi, and Frobel.

Theories of Personality (Insight Media, 1994, 20 min). This video uses discussions with clinicians and research psychologists to cover psychoanalytic, humanistic, social learning, cognitive, and trait approaches. It also addresses the stability of personality over time.

Understanding Psychology: Perspectives on Psychology (Insight Media, 2001, 30 min).

Exploring some of the major perspectives in psychology, this program uses everyday examples to bring theoretical concepts to life. It addresses the biological, psychodynamic, and behavioral approaches.

WEBSITE SUGGESTIONS

American Psychological Association: <http://www.apa.org/>

Association for Humanistic Psychology: <http://www.ahpweb.org>

Center for Evolutionary Psychology: <https://www.cep.ucsb.edu/>

Classics in the History of Psychology: <http://psychclassics.yorku.ca/topic.htm>

Classics in the History of Psychology: Wilhelm Wundt, *Principles of Physiological Psychology*:
psychclassics.yorku.ca/Wundt/Physio/

Focus on the Family: <http://www.focusonthefamily.com/>

The Future of Children: <https://futureofchildren.princeton.edu/>

Office for Human Research Protections, U.S. Department of Health & Human Services:
www.hhs.gov/ohrp/

Personality Theories: Albert Bandura: www.ship.edu/~cgboeree/bandura.html

Sigmund Freud on The Victorian Web: <http://www.victorianweb.org/science/freud/index.html>

Society for Research in Child Development: www.srctd.org

The University of Chicago Press Journals: <https://www.journals.uchicago.edu/>

World Health Organization: <https://www.who.int>

RESOURCES AVAILABLE WITHIN CONNECT

Listed below is a sampling of the resources available with this chapter within McGraw-Hill Education's digital learning platform, Connect.

Chapter	Activity Titles	Activity Type	Learning Objective
1	Nature versus Nurture Debate	Concept Clip	Describe the processes, periods, and issues in human development.
1	Continuity and Change	Video	Describe the processes, periods, and issues in human development.
1	Scientific Method	Concept Clip	Evaluate the methods developmental researchers use to collect data.
1	Erikson's Eight Life-Span Stages	Matching/ Sequencing	Summarize the main theories of human development.
1	Erikson's Psychosocial Theory of Development	Concept Clip	Summarize the main theories of human development.
1	Piaget's Stages of Development	Matching/ Sequencing	Summarize the main theories of human development.
1	Operant Conditioning: Reinforcement and Punishment	Concept Clip	Summarize the main theories of human development.
1	Bandura's Social Cognitive	Concept	Summarize the main theories of

	Theory	Clip	human development.
1	Naturalistic Observation	Interactivity	Evaluate the methods developmental researchers use to collect data.
1	Research Methods for Studying Infants	Video	Evaluate the methods developmental researchers use to collect data.
1	Challenges of Conducting Research on Adolescents	Video	Evaluate the methods developmental researchers use to collect data.
1	Correlation	Concept Clip	Evaluate the methods developmental researchers use to collect data.
1	Understanding Correlations	Interactivity	Evaluate the methods developmental researchers use to collect data.
1	Independent and Dependent Variables	Concept Clip	Evaluate the methods developmental researchers use to collect data.

1	Designing an Experiment: Dependent and Independent Variables	Interactivity	Evaluate the methods developmental researchers use to collect data.
1	Research Ethics	Interactivity	Summarize ethical concerns regarding the use of animals and humans as participants in experimental research.
1	Ethical Issues in Studying Infants	Video	Summarize ethical concerns regarding the use of animals and humans as participants in experimental research.
1	Newsflash: The Science “Reproducibility Crisis”	NewsFlash	Evaluate the methods developmental researchers use to collect data.

Identifying Research Methodology

Use your textbook to answer the questions regarding the following descriptions of (fictional) research studies:

1. A researcher is interested in whether there is a relationship between the sporting events in which siblings choose to engage. This researcher sent a survey to 500 different families and asked parents to write down the age and sex of each child and to list in which sports each child participated. The researcher collected all of the surveys and examined whether there was a relationship between siblings' choice of sports.

- a. What research method was employed in this study?

☐ Observation

☐ Case studies

☐
Survey/interview

☐
Standardized test

- b. Is the study described above **correlational** or **experimental**? (circle one) Why?

- c. Is the study described above **cross-sectional**, **longitudinal**, or **sequential**?

d. If the study is an experiment, what are the independent and dependent variables?

2. A researcher is interested in whether drinking water right before bed increases the likelihood that children will wet the bed at night. The researcher recruits fifty 5-year-old children to participate in their study. Twenty-five children were given two glasses of water 2 hours before their bedtime (one glass per hour) and 25 children are prohibited from receiving liquids within 2 hr of their bedtime. The researcher collects information from the parents of the children participating for 1 week—parents are telephoned and asked to report whether the child wet the bed each night.

a. What research method was employed in this study?

☐ Observation

☐ Case studies

☐
Survey/interview

☐
Standardized test

- b. Is the study described above **correlational** or **experimental**? (circle one)

Why?

- c. Is the study described above **cross-sectional**, **longitudinal**, or **sequential**?

- d. If the study is an experiment, what are the independent and dependent variables?

3. A researcher was interested in how children learn how to settle disagreements with peers.

The researcher talked to his 5-year-old daughter and asked her to describe how she interacted with her peers. The researcher then read a few stories to his daughter about children her age who got into disagreements and asked her what she would do in that situation. The researcher continued to interview his daughter like this for 5 years.

a. What research method was employed in this study?

☐ Observation

☐ Case studies

☐

Survey/Interview

☐

Standardized test

b. Is the study described above **correlational** or **experimental**? (circle one)

Why?

c. Is the study described above **cross-sectional**, **longitudinal**, or **sequential**?

d. If the study is an experiment, what are the independent and dependent variables?

4. A researcher was interested in whether the construct of helplessness (as shown by low persistence on tasks, negative affect or emotional state, and negative self-evaluations) is similar in toddlers, preschoolers, and older children. The researcher recruited a group of 2-year-olds and a group of 4-year-olds and brought them into a playroom setting. The children were videotaped playing with impossible puzzles (tasks that have been shown to induce failure experiences/helplessness), and “helpless” behaviors were measured. The children were brought back 2 years later (the first group of children were then 4 and the second group was 6 years of age) and were given another set of impossible puzzles. Helpless behaviors were again measured.

- a. What research method was employed in the above study?

☐

Observation

☐

Case studies

☐

Survey/interview

☐

Standardized test

- b. Is the study described above **correlational** or **experimental**? (circle one)

Why?

- c. Is the study described above **cross-sectional, longitudinal, or sequential**?
- d. If the study is an experiment, what are the independent and dependent variables?

5. A researcher is interested in whether boys or girls are more aggressive when playing with peers. The researcher goes to a playground every day for 5 weeks and watches children playing with one another. The researcher records every instance of aggression that he witnesses.

- a. What research method was employed in this study?

☐ Observation

☐ Case studies

☐
Survey/interview

☐
Standardized test

b. Is the study described above **correlational** or **experimental**? (circle one)

Why?

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c. Is the study described above **cross-sectional**, **longitudinal**, or **sequential**?

d. If the study is an experiment, what are the independent and dependent variables?

6. A researcher is interested in whether a mother's diet during pregnancy influences her baby's cognitive ability. The researcher finds a group of women who were malnourished during pregnancy and tests their infants' cognitive skills (the Bayley Scales of Infant Development) and finds another group of women who were not malnourished during pregnancy and gives the same test to their infants. The researcher then gives all of the children an IQ test (Stanford-Binet) when they reach the age of 6. Infants' and children's

scores are compared to norms for each age-group to see if the children in each group are below/at/above average in cognitive ability.

a. What research method was employed in this study?

☐ Observation

☐ Case studies

☐
Survey/interview

☐
Standardized test

b. Is the study described above **correlational** or **experimental**? (circle one)

Why?

c. Is the study described above **cross-sectional**, **longitudinal**, or **sequential**?

d. If the study is an experiment, what are the independent and dependent variables?

Answering Questions about Development

The goal of this research project is to conduct research on a topic in developmental psychology that you find interesting. On the first day of class, your instructor asked you to write down one or two questions you would like to have answered by the end of this course (e.g., Does bilingualism influence cognitive development?). Over the course of the semester, investigate the topic by going to the library and finding at least 10 relevant journal articles. Then, write a brief report that incorporates your answers to the following questions.

1. What is the question you are investigating?

2. Why is this question interesting to you?

3. How did you go about determining the answer to your question?

4. Describe the information you located to address your question.

5. What questions has this new information stimulated?

Parent–Child Interaction

In this project, you will observe a parent–child interaction and interpret it according to psychoanalytic, behavioral, and cognitive theoretical approaches. Go to a local supermarket, and watch a mother or father shop with a 2- to 4-year-old child. Describe the interactions you observe, including the child’s demands, verbal exchanges between parent and child, and ways in which the parent responds to the child’s demands. Then answer the questions that follow, referring to your observations.

Child: Age _____ Sex _____

Parent: Age _____ Sex _____

Description:

1. On what would a psychoanalytic theorist focus in this example? How would the sequence of observed events be explained?

2. How would a behavioral psychologist analyze the situation? What reinforcers or punishers characterized the interaction? Did specific things occur that would make a behavior more likely to occur in the future? Less likely to occur?

3. On what would a cognitive theorist focus in this situation? Why?

4. What is the child learning in this situation? What does the child already know?