Online Test Bank

to accompany

The Life Span: Human Development for Helping Professionals Third Edition

Patricia C. Broderick

West Chester University of Pennsylvania

Pamela Blewitt

Villanova University

Prepared by **Gypsy M. Denzine**Northern Arizona University



Boston Columbus Indianapolis New York San Francisco Upper Saddle River

Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montreal Toronto

Delhi Mexico City Sao Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo

This work is protected by United States copyright laws and is provided solely for the use of instructors in teaching their courses and assessing student learning. Dissemination or sale of any part of this work (including on the World Wide Web) will destroy the integrity of the work and is not permitted. The work and materials from it should never be made available to students except by instructors using the accompanying text in their classes. All recipients of this work are expected to abide by these restrictions and to honor the intended pedagogical purposes and the needs of other instructors who rely on these materials.

Copyright © 2010 by Pearson Education, Inc., Upper Saddle River, New Jersey 07458.

All rights reserved. Printed in the United States of America. This publication is protected by Copyright and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. For information regarding permission(s), write to: Rights and Permissions Department.

Pearson[®] is a registered trademark of Pearson plc

Instructors of classes using Broderick and Blewitt's *The Life Span*, 3e may reproduce material from the test bank for classroom use.

ISBN-10: 0-13-715248-5

ISBN-13: 978-0-13-715248-3

10 9 8 7 6 5 4 3 2 1



www.pearsonhighered.com

CONTENTS

Chapter 1	Organizing Themes in Development1
Chapter 2	Heredity, Environment, and the Beginnings of Human Life11
Chapter 3	Neural and Cognitive Developments in the Early Years21
Chapter 4	Emotional Development in the Early Years32
Chapter 5	The Emerging Self and Socialization in the Early Years42
Chapter 6	Realms of Cognition in Middle Childhood52
Chapter 7	Self and Moral Development: Middle Childhood Through Early Adolescence
Chapter 8	Gender and Peer Relationships: Middle Childhood through Early Adolescence
Chapter 9	Physical, Cognitive, and Identity Developments in Adolescence 82
Chapter 10	The Social World of Adolescence
Chapter 11	Physical and Cognitive Developments in Young Adulthood101
Chapter 12	Socioemotional and Vocational Developments in Young Adulthood111
Chapter 13	Middle Adulthood: Cognitive, Personality, and Social Developments121
Chapter 14	Living Well: Stress, Coping, and Life Satisfaction in Adulthood131
Chapter 15	Gains and Losses in Late Adulthood141
Chapters 1-1	5 Answer Key for Multiple Choice Questions
Chapters 1-1	5 Answer Key for Essay Questions

Organizing Themes in Development

Outline

I. Reflection and Action

The Gap between Science and Practice

II. The Big Picture: Models and Metaphors

Stage Models

Freud's Personality Theory

Erikson's Personality Theory

Piaget's Cognitive Development Theory

Incremental Models

Learning Theories

Information Processing Theories

Multidimensional Models

Bronfenbrenner's Bioecological Model

Multidimensional Models of Developmental Risk and Outcome

Lifespan Developmental Theory

- IV. Applying Models and Metaphors
- V. Major Issues in Development

Nature And Nurture

Critical Periods And Unlimited Plasticity

Continuity And Change

Universality And Specificity

Qualitative And Quantitative Change

Activity And Passivity

VI. Applications

Some Rules of Thumb

VII. Summary

VIII. Case Study

Discussion Questions

IX. Journal Questions

X. Key Terms

Multiple Choice Questions

- 1. Dr. Jones encountered a problem with a new client in therapy. Using the model of reflective practice described in Chapter 1, what is the sequence of steps he should use in order to work with this client effectively?
 - a. Reflect on what has worked best in his own personal experience and apply that knowledge to the client's problem.
 - b. Reflect on well-established theories that fit the case; apply the theoretical knowledge to the individual's case; and then test out new ways of thinking about the problem if theoretical knowledge does not suffice.
 - c. Apply experience-based knowledge first, and then use theory-based knowledge as the next step.
 - d. First test out any method by subjecting it to rigorous scientific experimentation and then apply it for use with the client.
- 2. Theories of development differ from opinion primarily because
 - a. they provide a complete picture of development.
 - b. they have been proven to be true by their developers.
 - c. they have been based on scientific research.
 - d. they are more abstract than opinions about development.
- 3. Which of the following helpers is most likely to have an implicit "incrementalist" belief about IQ?
 - a. A counselor who recommends a strategy of academic skill building for a client who is experiencing academic problems.
 - b. A therapist who helps the client adjust to the limitations of his academic ability.
 - c. A school counselor who bases the decision about which career information to provide on the client's intelligence test results.
 - d. A counselor who develops a program to track elementary schoolaged children in classes that reflect their academic achievement.
- 4. Stage theories of development typically describe changes in behavior, cognition, or some other area of development that are ______ different from each other at each of the various stages.
 - a. quantitatively
 - b. incrementally
 - c. qualitatively
 - d. cumulatively

- 5. Mrs. Washington is conducting her weekly group counseling session for single young adults. Karen, a lonely young professional woman, talks about feeling abandoned by her boyfriend. The other group members listen patiently and respond empathically. The counselor allows Karen to talk at length, sensing Karen's need to express herself and noting the group's willingness to support her. Mrs. Washington reflects Karen's feeling with concern and sensitivity. What would operant learning theory predict about Karen's behavior in the next group session?
 - a. Karen will be embarrassed about her past self-disclosures and feel anxious about speaking up.
 - b. Karen will not self-disclose because she fears the group will lose patience.
 - c. Karen will not self-disclose because her problems have been resolved.
 - d. Karen will speak openly because she has previously received attention and support.
- 6. Using the example above, what would social learning theorists predict about group behavior in the next session?
 - a. Group members will be encouraged to self-disclose because of the way Karen's self-disclosure was received.
 - b. Group members will be inhibited about self-disclosing because they do not want to elicit criticism.
 - c. Karen's behavior will have no effect on other members of the group.
 - d. Group members will scapegoat Karen for her self-absorption.
- 7. Using Erikson's developmental theory as a framework, which of the following statements is an accurate representation of his ideas?
 - a. An individual cannot progress to a later stage unless the earlier stage has been resolved successfully and completely.
 - b. Successful progression through the stages of development depends upon effective resolution of the Oedipal crisis.
 - c. Successful resolution of a crisis at any stage depends upon having more positive than negative experiences in the psychosocial area of major concern.
 - d. Highly intelligent individuals can skip specific stages and make progress at a faster rate than other people.
- 8. Models of development which hold that change typically occurs in shifts between periods of relative stability and periods of disequilibrium are called
 - a. incremental models.
 - b. stage models.
 - c. multidimensional model.
 - d. information-processing models.

- 9. Models of development which hold that change occurs in small, gradual steps are called
 - a. incremental models.
 - b. stage models.
 - c. multidimensional models.
 - d. information-processing models.
- 10. Models of development which hold that change occurs as a function of reciprocal influences, both from within the person and from the external environment are called
 - a. incremental models.
 - b. stage models.
 - c. multidimensional models.
 - d. information-processing models.
- 11. In Bronfenbrenner's model, proximal processes refer to
 - a. independent changes in mental processes.
 - b. favorable developmental conditions that are more likely to exist in one particular stage of development than in another.
 - c. reciprocal interactions between an organism and its immediate environment.
 - d. indirect influences on an organism.
- 12. Juan, a seven-month old infant, lives in a city where the availability of high quality child care is very limited. His mother is forced to leave Juan in the care of a young woman who also cares for 5 other infants and toddlers in her small apartment. According to Bronfenbrenner's theory, which of the following influences on Juan's development represents an example of a proximal process?
 - a. The quality of care-giving Juan receives in day care.
 - b. Juan's genetic inheritance.
 - c. State legislation regarding licensing of day care providers.
 - d. Governmental policies and subsidies for child care that apply in the city wherein Juan's family resides.
- 13. Using the example above, which of the following influences represents an example of a distal process?
 - a. The sensitivity of Juan's caregiver
 - b. Governmental policies and subsidies for child care that apply in the city
 - c. The quality of care-giving provided by Juan's mother
 - d. The quality and characteristics of the apartment complex in which Juan and his mother reside

14.	afford it, hig level of the	mother live in a small rented apartment in a large city. Even if she could the quality child care centers are very hard to find in her neighborhood. Which the environment, according to Bronfenbrenner's model, limits her access to high care in her community? macrosystem exosystem microsystem mesosystem

- 15. Contemporary developmentalists focus on which question concerning nature and nurture?
 - a. Is nature the most important determinant of developmental change?
 - b. Is nurture the most important determinant of developmental change?
 - c. How do we explain the mechanisms by which nature and nurture interact to affect development?
 - d. Why is nurture most influential at certain developmental periods?
- 16. A kitten whose eyes are covered during the first months of its life loses the ability to see clearly in ways that would have been possible without the loss of early visual stimulation. This effect remains despite later attempts to remediate the loss. This is an example of which of the following?
 - a. behavior genetics
 - b. critical period
 - c. plasticity
 - d. visual demand
- 17. A group of people characterized by the same traditions, attitudes, values, and beliefs handed down from one generation to another constitute a (an)______ group
 - a. socioeconomic group
 - b. racial group
 - c. ethnic group
 - d. cohort
- 18. Which of the following educational applications derives from a theory of development that espouses a belief in passivity?
 - a. Children's learning should be highly structured by teachers and include a great deal of memorization.
 - b. Children should be allowed maximum freedom to choose what they wish to learn.
 - c. Children should be quiet in a classroom.
 - d. Children should be encouraged to express their thoughts on educational topics.

- 19. The belief that individuals create their own meaning by interpreting new experience in the light of past experience is a fundamental proposition of
 - a. behaviorism.
 - b. rationalism.
 - c. transactionalism.
 - d. constructivism.
- 20. Keisha is a 35-year-old African-American woman who is depressed. Her presenting concerns include marital distress, the imminent possibility of losing her job, overeating, and chain-smoking. As you listen to her story, you begin to construct a picture of her developmental history. How might Keisha's problems have developed using one possible *stage theory* perspective?
 - a. Keisha's difficulties are most likely related to societal conditions like poverty and racism.
 - b. Keisha's problems are most likely related to insufficient emotional gratification during infancy when oral needs are paramount.
 - c. Keisha's problems are most likely related to lack of appropriate models of effective marital communication.
 - d. All of the above.
- 21. What might be the most likely cause of Keisha's problems if you took an incremental theory perspective on her development?
 - a. Keisha's difficulties are most likely related to societal conditions like poverty and racism.
 - b. Keisha's problems are most likely related to insufficient emotional gratification during infancy when oral needs are paramount.
 - c. Keisha's problems are most likely related to lack of appropriate models of effective marital communication.
 - d. All of the above.
- 22. What might be the most likely cause of Keisha's problems if you took a multidimensional theory perspective on her development?
 - a. Keisha's difficulties are most likely related to societal conditions like poverty and racism.
 - b. Keisha's problems are most likely influenced by her genetic inheritance.
 - c. Keisha's problems are most likely related to lack of appropriate models of effective marital communication.
 - d. All of the above.

23.	Counselors must recognize the principle of: individual pathways of development may result in a wide range of possible outcomes.					
	a.	equifinality				
	b.	hierarchical integration				
	c.	dysfunctionality				
	d.	multifinality				
24.		levelopmental theories, developmental change is thought to be largely				
	finished by					
	a.	18				
	b.	30				
	c.	45				
	d.	none of the above				
25.		t children's development is more affected by biological factors and adults' t is more affected by cultural factors is part of				
	a.	Piaget's cognitive stage theory				
	b.	lifespan developmental theories				
	c.	social learning theory				
	d.	none of the above				
26.	_	ment of a tree includes change in size, calledand change in				
	a.	quantitative, qualitative				
	b.	transformational, qualitative				
	c.	incremental, growth				
	d.	qualitative, quantitative				
27.	found that <i>p</i> protective fateens' acade academics b	Frisk and protective factors in African American adolescents, researchers arental school involvement and peer support for academics are both actors, but they work differently. Parental school involvement benefits all mic performance regardless of how many risks they face. Peer support for enefits teens who face many risks, but has little effect on teens who face few fects of parental school involvement would be characterized as indirect effects.				
	b.	moderating effects.				
	c.	direct effects.				
	d.	pseudo effects.				

- 28. Counselors use Bronfenbrenner's model most explicitly in their work with clients when they
 - a. recognize the primary importance of genetic influences on behavior.
 - b. consider multiple levels of influence on the individual and select interventions that are targeted to multiple levels.
 - c. pay close attention to the stage of development that characterizes the client.
 - d. understand that client's developmental tasks must be met in each stage of development.
- 29. When clinicians assess a client's presenting problem(s) in order to plan for treatment, which of the following approaches to diagnosis reflects a developmental viewpoint?
 - a. Consider those issues in a client's life which result from multifinality.
 - b. Count the number of symptoms currently manifested in order to reach a specific diagnosis.
 - c. Assess the person's level of symptomology on a checklist and assign a diagnosis only when a certain percentile has been reached.
 - d. Assess the nature of the problem by simultaneously considering the person's unique history, the person's interpersonal context, and challenges to the person from the extrapersonal environment.
- 30. Mrs. Dubois knows that her son, Andre, is very advanced in understanding math compared to his first grade peers. He can do multiplication and even some simple division problems, which he enjoys. However, he is rather immature in his social relationships and doesn't share or interact well with classmates. His social skills are not what his mother would expect, given his advanced cognitive development in math. Piaget's term for this variation in skills is
 - a. hierarchical organization.
 - b. decalage.
 - c. preoperational intelligence.
 - d. accommodation.
- 31. The scientific usage of the word *theory* is best described as
 - a. a proposed explanation whose status is still conjectural and untested.
 - b. a personal choice that support's one's worldview.
 - c. a more or less verified or established explanation that synthesizes a large body of information to account for known facts or phenomena.
 - d. a causal explanation of facts or phenomena that fits with an individual's best assessment of a situation.

- 32. Gisela is a 6-year-old Peruvian girl who lives with her family in a small rural mountain village. She works with her mother on a farm and helps her father take the produce to a market to sell. She does not know how to read, but she understands the cost of items and can handle the money, making change without errors. Sophie is a 6-year-old who lives in the US. She is in the first grade and is making great progress in learning to read and write. She is also gaining skill in computer use. What is the best way to explain the development of these two children?
 - a. The progression of cognitive development is not universal; it is different for children in different cultures.
 - b. The processes involved in cognitive development are similar across cultures, but the specific kinds of knowledge acquired may differ depending upon children's culture.
 - c. The content of children's knowledge is similar across cultures, but the processes involved in cognitive development differ depending upon children's culture.
 - d. Cognitive development is the same for all children, regardless of culture.

Chapter 1 Essay Questions

(See Answer Key for Potential Essay Answers)

- 33. Compare and contrast stage, incremental, and multidimensional models of development. What specific contributions does each perspective make to our knowledge of development?
- 34. Create a case scenario using an example of a helping professional that describes the process of reflective practice.
- 35. Explain why having a working knowledge of development or a "developmental template" is useful to helping professionals.
- 36. In the applications section of Chapter 1, several rules of thumb are provided to guide helping professionals incorporate developmental knowledge into their work. Choose three of the guidelines and, for each of these, provide either
 - a) a detailed and specific example of how helping professionals incorporate the guideline in a practice setting, or
 - b) a specific and detailed example of how you will incorporate this guideline into your practice.

Heredity, Environment, and the Beginnings of Human Life

Outline

- I. Introduction: "The Nature/Nurture Illusion"
- II. Mechanisms of Genetic Influence: How do genes work?

Biological Inheritance

Chromosomes and DNA

Intergenerational Transmission of Chromosomes

How Genes Influence Traits

Genes and Their Function

Gene Alleles and Their Relationships

The Inheritance of Sex

Hereditary Diseases

Disorders Influenced by Recessive, Defective Alleles

Disorders Caused by Dominant, Defective Alleles

Disorders of Polygenic Origin

Disorders Caused by Chromosomal Abnormalities

Sex-linked Disorders

III. Explaining Behavior: Focus on Genetics

Molecular Genetics

Behavior Genetics

Genetic Influences on the Environment

Shifting Focus to the Coaction of Genes and Environment IV. Unexpected Sources of Environmental Effects The Case for Coaction The Epigenetic Model: A Multidimensional Perspective V. Healthy Prenatal Development **Genetic Interventions** Environmental Influences on Prenatal Development Teratogens Nutrition Stress Applications VI. Genetic Counseling Healthy Baby Guidelines Helping the Most Vulnerable: Preterm and Low Birth Weight (LBW) Babies The Healing Touch What is Massage Therapy Beyond Massage Therapy VII. Summary Case Study VIII. **Discussion Questions** IX. **Journal Questions** X. **Key Terms**

Multiple Choice Questions

Complete the following analogy: mitosis is to meiosis as

1.

ive. Je gical pa	DNA is to RNA 46 is to 23 night is to day e color alleles are dominant over "blue" eye color alleles, which are enna has brown eyes. Her husband, Bill, has blue eyes. Jenna and Bill are the arents of James, who has blue eyes. lor gene alleles does Jenna have? Bb (one brown and one blue allele) BB (two brown alleles) bb (two blue alleles)
d. vn" eye ive. Je gical pa eye co a. b.	night is to day e color alleles are dominant over "blue" eye color alleles, which are enna has brown eyes. Her husband, Bill, has blue eyes. Jenna and Bill are the arents of James, who has blue eyes. lor gene alleles does Jenna have? Bb (one brown and one blue allele) BB (two brown alleles) bb (two blue alleles)
vn" eye ive. Je gical pa eye co a. b.	e color alleles are dominant over "blue" eye color alleles, which are enna has brown eyes. Her husband, Bill, has blue eyes. Jenna and Bill are the trents of James, who has blue eyes. lor gene alleles does Jenna have? Bb (one brown and one blue allele) BB (two brown alleles) bb (two blue alleles)
ive. Jegical page eye coa.	enna has brown eyes. Her husband, Bill, has blue eyes. Jenna and Bill are the arents of James, who has blue eyes. lor gene alleles does Jenna have? Bb (one brown and one blue allele) BB (two brown alleles) bb (two blue alleles)
gical pa eye co a. b.	arents of James, who has blue eyes. lor gene alleles does Jenna have? Bb (one brown and one blue allele) BB (two brown alleles) bb (two blue alleles)
eye co a. b.	lor gene alleles does Jenna have? Bb (one brown and one blue allele) BB (two brown alleles) bb (two blue alleles)
a. b.	Bb (one brown and one blue allele) BB (two brown alleles) bb (two blue alleles)
b.	BB (two brown alleles) bb (two blue alleles)
	bb (two blue alleles)
C.	·
d.	DDD (three heavy alleles)
a.	BBB (three brown alleles)
a. b.	of blue eyes. phenotype regulator dominatrix
c. d.	Carrier
u.	Carici
_	efective gene alleles can cause hereditary disorders. It is estimated that most recessive, defective alleles in their genotypes.
	zero
e have	three to five
e have a.	

- 5. Males are less likely to survive than females, both before and after birth. One important reason is that
 - a. males have more dominant, defective alleles than females.
 - b. males are more vulnerable to disorders caused by X-linked recessive alleles than females.
 - c. males have two Y chromosomes.
 - d. most societies value males less than females and provide males with less protection.
- - a. passive
 - b. evocative
 - c. active
 - d. shared
 - 7. One criticism of the behavior genetics approach to understanding the influence of genes on behavior has been that
 - a it is based on the incorrect assumption that monozygotic twins are genetically alike.
 - b the distinction between shared and nonshared environments is insupportable.
 - c. it is based on an oversimplication that the joint effects of genetic and environmental influences "add up" to produce a behavior or outcome.
 - d it is based on the incorrect assumption that environments are not affected by a person's genes
 - 8. Studies by Kauffman & Meaney (2007) indicate that animals exposed to certain behaviors caused changes in their regulatory DNA. For example, in one study young rats exposed to stress vocalized their anxiety. Their rat mothers, alerted to this distress, responded with diligent caregiving behavior that altered the development of the hippocampus or part of the rats' brains. Which of the following processes or principles does this example demonstrate?
 - a Dominant-recessive gene relationships
 - b Active gene effects
 - c The role of regulator genes in behavior genetics
 - d Epigenesis

- 9. Based on your knowledge of prenatal development, which of the following sequences would you expect to be correct?
 - a. The heart begins to form before the hands.
 - b. The hands begin to form before the heart.
 - c. The legs begin to form before the head.
 - d. The feet begin to form before the lungs.
- 10. Somatic cell therapy and germline gene therapy
 - a. are currently in widespread use to treat post-traumatic stress syndrome in infants.
 - b. are designed to treat maternal depression.
 - c. are currently being tested as treatments for post-traumatic stress syndrome in infants.
 - d. are currently being tested as treatments for genetic disorders.
- 11. Which of the following statements is true about the effects of teratogens on the developing fetus?
 - a. Any given teratogen usually has the same effect regardless of when in prenatal development exposure occurs.
 - b. Not all developing fetuses are susceptible to a given teratogen.
 - c. A teratogen will usually have the same effect regardless of how much exposure the fetus has to that teratogen.
 - d. Ancient Greeks believed in teratogens, but modern science has been unable to identify any.
- 12. When she was pregnant with Joey, Joey's mother had a poor diet because food was in short supply in her war-torn country. The war ended after Joey was born. His middle class mother was able to provide him with adequate, nutritious food throughout his childhood. Which of the following outcomes would you expect for Joey?
 - a. Joey may show few, if any, long term negative effects from his prenatal deprivation..
 - b. Joey will probably experience serious long term, cognitive deficits.
 - c. Joey will probably experience serious long term emotional deficits, but not cognitive problems.
 - d. Joey is at greater risk of obesity than youngsters who have adequate prenatal nutrition.

- 13. The available data indicate that chronic maternal stress during pregnancy has which of the following effects on the fetus?
 - a. No effects
 - b. Arouses the fetus's own stress response temporarily, but has no lasting effects
 - c. Is related to newborn hyperactivity and irritability
 - d. Causes long term psychopathology
- 14. The hypothalamic-pituitary-adrenal axis (HPA axis) plays a significant role in
 - a. the human response to stress.
 - b. X-linked recessive diseases.
 - c. determining the sex of a fetus.
 - d. determining eye color.
- 15. Which of the following is an accurate description of the long term effects of chronic stress on the body?
 - a. The ability of the immune system to fight infection and ward off disease is compromised.
 - b. There are no effects on the immune system, and only short term effects on the cardiovascular system.
 - c. There are no effects on the cardiovascular system, but long term effects on the skeletal muscles.
 - d. There are no lasting effects on the body when the stress ends all physical systems return to normal.
- 16. Ms. Dawson recently gave birth to twins, a girl and a boy. Which of the following statements about them must be true?
 - a. They share 100 per cent of their genes.
 - b. They are monozygotic.
 - c. They are dizygotic.
 - d. They originated from a single zygote.
- 17. Select the answer for which **both** of the following statements are true:
 - -There are 46 of these in the nuclei of human cells.
 - -These are composed of deoxyribonucleic acid.
 - a. Teratogens
 - b. Zygotes
 - c. Chromosomes
 - d. Genes

- 18. The Human Genome Project is an example of work in
 - a. genetic counseling.
 - b. nutrition.
 - c. molecular genetics.
 - d. behavior genetics.
- 19. If you look at the karyotypes of person A and person B and discover that they look alike, what can you infer is the **same** about persons A and B?
 - a. Their parents
 - b. Their sex
 - c. Their height
 - d. Their blood type
- 20. Sally, age 28, recently married John, age 45. They would like to have a child, but they are concerned that they may be at high risk to have a child with a chromosomal abnormality, like Down's syndrome, because of John's age. What is their genetic counselor likely to tell them?
 - a. They are at higher than average risk for some chromosomal disorders because of John's age, but not for Down's syndrome.
 - b. They are at higher than average risk for chromosomal disorders of all sorts because of John's age.
 - c. There is no relationship between parents' age and chromosomal disorders in their offspring.
 - d. The risk of *any* chromosomal disorder in a child is only related to the mother's age, not to the father's age.
- 21. It appears that for most mental illnesses and behavioral disorders, like alcoholism and clinical depression, the genetic contribution can best be described as
 - a. the result of a pair of recessive, defective genes.
 - b. the result of a dominant, defective gene.
 - c. the result of a single gene mutation.
 - d. polygenic.

- 22. Symptoms of fetal alcohol syndrome (FAS) include
 - a. addiction to alcohol.
 - b. blindness and shortened limbs.
 - c. flipper arms.
 - d. widely spaced eyes and flattened nose.
- 23. Rat pups from a hypertensive strain of rats have a genetic predisposition to develop hypertension (high blood pressure). A pup from this strain will only develop hypertension, however, if it is reared by a hypertensive mother rat. If it is reared by a nonhypertensive mother rat, the pup will not develop hypertension. Also, a rat pup from a nonhypertensive strain of rats will not develop hypertension, even if is raised by a hypertensive mother. This example from animal research is a good illustration of
 - a. coaction.
 - b. the role of teratogens.
 - c. passive gene effects on the environment.
 - d. cephalo-caudal development.
- 24. Children who suffer severe protein and calorie shortages at any age may experience stunted growth, a protuberant belly, and extreme apathy. This severe starvation syndrome is called
 - a. lowest observable effect.
 - b. kwashiorkor.
 - c. Huntington's disease.
 - d. proximo-distal development.
- 25. Robert and Nadine have a troubled marriage. Both have been laid off. Robert earns only enough now at part-time jobs to pay the rent on a small apartment. The couple has inadequate access to food or health care. When they realize that Nadine is pregnant, they feel desperate, and they talk to a social worker at a local clinic about their situation. The social worker is able to provide them with referrals to a food outlet, but she is unable to find a prenatal care clinic that provides free services in their neighborhood, and she cannot help them with the stresses of the continuing conflict between them. Considering what you have learned about the effects of multiple risk factors, what would you say about the potential value of the social worker's efforts for the couple's developing fetus?
 - a. The fewer risk factors, the better off the child will be. Therefore, the unborn child is likely to be better off even with the limited help the social worker provided.
 - b. The unborn child is not likely to be benefited by eliminating only one risk factor
 - c. The unborn child might have been benefited if prenatal care were found, but improving prenatal nutrition is not important.
 - d. The social worker has actually eliminated the one risk factor that affects the unborn child poor prenatal nutrition. The health care and stress factors will only be important after the child is born.

- 26. Clare and Maria are 3-year-old twins whose immigrant parents work as laborers in a factory in the southwestern part of the US. The family is living below the poverty line and earning enough money to pay for food and rent is a daily struggle. The only health care the family can access is in emergency situations. Both children are below the 20th percentile in their rate of growth compared to other children their age. A behavior geneticist might consider the influence of poverty on the twins' development as a(n)
 - a. evocative effect.
 - b. shared effect.
 - c. nonshared effect.
 - d. passive effect.
- 27. The following are all parts of the process of genetic counseling except:
 - a. constructing a pedigree that illustrates the patterns of genetic inheritance in the families.
 - b. helping clients manage the emotional consequences of genetic testing.
 - c. disputing clients' irrational ideas about genetic testing.
 - d. helping clients anticipate the consequences of possible medical disorders and secure appropriate care.
- 28. Massage therapy for infants has been very successful in promoting weight gain and social interaction, and in decreasing distress in low birth weight infants. Based upon developmental research, what is the best explanation for this?
 - a. Touch is the best developed sense at birth and therefore the most effective avenue for soothing and regulating the newborn.
 - b. Infants' bodies take in more nutrients when they are touched as they nurse.
 - c. When the infant is massaged, its attachment to the caregiver is strengthened.
 - d. Crying and other distress is reduced because the infant is paying attention to the person giving the massage.
- 29. Studies estimate the heritability of a certain trait is around 50%. What is the best interpretation of this finding?
 - a. A person inherits 50% of the genes for this trait from one of her parents.
 - b. A person inherits 25% of the genes for this trait from each of her parents.
 - c. When people differ on this trait, half of the variation is due to genetic differences between them.
 - d. This is a dominant trait.

- 30. Of the following, which is the most accurate example of coaction?
 - a. Genes that are related to a specific disorder may be expressed phenotypically only in a certain kind of environment.
 - b. Genes for a disorder that are on the X-chromosome will only be expressed in females.
 - c. The environment and the genes have an equal influence on a particular disorder.
 - d. Genes will have a greater influence on the development of a disorder when the genes are dominant.

Chapter 2 Essay Questions

(See Answer Key for Potential Essay Answers)

- 31. Genes have their effects on the proteins and enzymes produced by the cell. Yet, there appear to be genetic influences on behavior. Take some example of a behavior or a behavioral disorder, and explain how genes operating at a cellular level could have any effect at the behavioral level.
- 32. Explain why it is important for a helping professional to be aware of the coaction of genes and environment. Be sure to include a definition of coaction, with examples. Then, provide a good example of how an understanding of coaction would be useful in counseling.
- 33. There are several principles that govern the effects of teratogens on the developing fetus. Describe these principles, giving examples.
- 34. What advice could you provide a pregnant teenager in order to help her assure the health of her baby?

ANSWERS FOR ESSAY	QUESTIONS	171

Answer Key for Multiple Choice Questions

(Aligned with Text pages and Section Heads; Essay answers follow Multiple Choice Log)

Item	Correct	Page #	Subject Heading
Number	Answer		
1.1	b	2	Reflection and Action
1.2	С	3	A Historical Perspective on Contemporary
			Developmental Theories
1.3	a	22	Major Issues in Development
1.4	c	22	Major Issues in Development
1.5	d	13	A Historical Perspective on Contemporary
			Developmental Theories
1.6	a	13	A Historical Perspective on Contemporary
			Developmental Theories
1.7	c	9-10	A Historical Perspective on Contemporary
			Developmental Theories
1.8	b	5, 12	A Historical Perspective on Contemporary
			Developmental Theories
1.9	a	22	Applying Theory to Practice
1.10	c	14	A Historical Perspective on Contemporary
			Developmental Theories
1.11	c	15-16	A Historical Perspective on Contemporary
			Developmental Theories
1.12	a	15-16	A Historical Perspective on Contemporary
1.10	1	1.4	Developmental Theories
1.13	b	14	A Historical Perspective on Contemporary
1 14	1	1.5	Developmental Theories
1.14	b	15	A Historical Perspective on Contemporary
1 15		10	Developmental Theories Major Japanesia Development
1.15	C	18	Major Issues in Development
1.16	b	18-19	Major Issues in Development
1.17	b	20	Major Issues in Development
1.18	a	22	Major Issues in Development
1.19	d	23	Major Issues in Development
1.20	b	23	A Historical Perspective on Contemporary
1.21		10	Developmental Theories
1.21	c	13	A Historical Perspective on Contemporary
1.22		16.17	Developmental Theories
1.22	d	16-17	Applying Theory to Practice
1.23	d	26	Applications
1.24	d	15-16	A Historical Perspective on Contemporary
			Developmental Theories

1.25	b	15-16	A Historical Perspective on Contemporary
			Developmental Theories
1.26	a	22	Major Issues in Development
1.27	С	26	Focus on Developmental Psychopathology
1.28	b	14-15	A Historical Perspective on Contemporary
			Developmental Theories
1.29	d	23-24	Applications
1.30	b	11	A Historical Perspective on Contemporary
			Developmental Theories
1.31	С	3	Reflection and Action
1.32	b	20-21	Major Issues in Development
2.1	c	36-37	Mechanisms of Genetic Influence: How Do
			Genes Work?
2.2	a	39	Mechanisms of Genetic Influence: How Do
		20	Genes Work?
2.3	d	39	Mechanisms of Genetic Influence: How Do
2.4	1.	42.42	Genes Work? Mechanisms of Genetic Influence: How Do
2.4	b	42-43	Genes Work?
2.5	b	42-43	Mechanisms of Genetic Influence: How Do
2.3	U	42-43	Genes Work?
2.6	С	46	Explaining Behavior: Focus on Genetics
2.7	c	47	Explaining Behavior: Focus on Genetics
2.8	d	49	Epigenesis: The Gene/Environment Dance
2.9	a	54	Healthy Prenatal Development
2.10	d	38	Healthy Prenatal Development
2.11	b	53	Healthy Prenatal Development
2.12	a	53-54	Healthy Prenatal Development
2.13	С	58-59	Healthy Prenatal Development
2.14	a	58	Healthy Prenatal Development
2.15	a	58-59	Healthy Prenatal Development
2.16	С	45	Explaining Behavior: Focus on Genetics
2.17	c	35	Mechanisms of Genetic Influence: How Do
			Genes Work?
2.18	С	44	Explaining Behavior: Focus on Genetics
2.19	b	35	Mechanisms of Genetic Influence: How Do
			Genes Work?
2.20	a	43	Mechanisms of Genetic Influence: How Do
			Genes Work?
2.21	d	43	Mechanisms of Genetic Influence: How Do
			Genes Work?
2.22	d	52	Healthy Prenatal Development
2.23	a	49	Epigenesis: The Gene/Environment Dance
2.24	b	57	Healthy Prenatal Development

2.25	a	56-57	Healthy Prenatal Development
2.26	b	46	Epigenesis: The Gene/Environment Dance
2.27	С	60-61	Applications
2.28	a	62	Applications
2.29	С	39-40	Mechanisms of Genetic Influence: How Do
			Genes Work?
2.30	a	49	Mechanisms of Genetic Influence: How Do
			Genes Work?
3.1	d	72	The Brain
3.2	a	72	The Brain
3.3	c	73	The Brain
3.4	c	73	The Brain
3.5	b	69	The Brain
3.6	a	73	The Brain
3.7	d	74	The Brain
3.8	a	74	The Brain
3.9	С	79	Cognitive Development
3.10	С	79-80	Cognitive Development
3.11	b	79	The Brain
3.12	b	82	Cognitive Development
3.13	С	81-82	Cognitive Development
3.14	a	78	Cognitive Development
3.15	d	79-93	Cognitive Development
3.16	b	78-79	Cognitive Development
3.17	a	81	Cognitive Development
3.18	b	82	Cognitive Development
3.19	d	79-84	Cognitive Development
3.20	a	84	Cognitive Development
3.21	d	86	Cognitive Development
3.22	a	90	Cognitive Development
3.23	a	96	Cognitive Development
3.24	d	96-97	Cognitive Development
3.25	b	102	Cognitive Development
3.26	b	96	Cognitive Development
3.27	С	102-103	Cognitive Development
3.28	a	94	Cognitive Development
3.29	С	87-88	Cognitive Development
3.30	b	79	Cognitive Development
3.31	b	93	Cognitive Development
4.1	С	114	Theories of Emotions: The State of the Art
4.2	d	116	Theories of Emotions: The State of the Art
4.3	b	116	Early Caregiver-Infant Interactions and
			Emotional Development

4.4	С	118	Early Caregiver-Infant Interactions and Emotional Development
4.5	a	118	Early Caregiver-Infant Interactions and Emotional Development
4.6	d	118	Early Caregiver-Infant Interactions and Emotional Development
4.7	d	119	Early Caregiver-Infant Interactions and Emotional Development
4.8	a	119	Early Caregiver-Infant Interactions and Emotional Development
4.9	c	119	Early Caregiver-Infant Interactions and Emotional Development
4.10	b	123-124	Early Caregiver-Infant Interactions and Emotional Development
4.11	a	125	Early Caregiver-Infant Interactions and Emotional Development
4.12	c	124	Early Caregiver-Infant Interactions and Emotional Development
4.13	c	126	Early Caregiver-Infant Interactions and Emotional Development
4.14	b	126-127	Early Caregiver-Infant Interactions and Emotional Development
4.15	a	128	Early Caregiver-Infant Interactions and Emotional Development
4.16	b	128-129	Early Caregiver-Infant Interactions and Emotional Development
4.17	c	130	Early Caregiver-Infant Interactions and Emotional Development
4.18	c	133	Early Caregiver-Infant Interactions and Emotional Development
4.19	b	126	Early Caregiver-Infant Interactions and Emotional Development
4.20	d	133	Early Caregiver-Infant Interactions and Emotional Development
4.21	c	139	Early Caregiver-Infant Interactions and Emotional Development
4.22	b	120	Early Caregiver-Infant Interactions and Emotional Development
4.23	b	117-118	Early Caregiver-Infant Interactions and Emotional Development
4.24	d	126-127	Early Caregiver-Infant Interactions and Emotional Development
4.25	a	129, 134	Early Caregiver-Infant Interactions and Emotional Development
4.26	С	129	Early Caregiver-Infant Interactions and Emotional Development

4.27	a	129-130	Early Caregiver-Infant Interactions and
		12) 130	Emotional Development
4.28	b	143	Early Caregiver-Infant Interactions and
			Emotional Development
4.29	С	141	Early Caregiver-Infant Interactions and
			Emotional Development
4.30	a	140	Early Caregiver-Infant Interactions and
			Emotional Development
5.1	С	159	Early Socialization: Parenting and the
			Development of the Self-System
5.2	a	149	The Self-System: Traditional Conceptions
5.3	d	149-150	The Self-System: Traditional Conceptions
5.4	d	149	The Self-System: Traditional Conceptions
5.5	b	150	The Self-System: Traditional Conceptions
5.6	d	149-	The Self-System: Traditional Conceptions
		150151	1
5.7	С		The Early Development of the Self-System
5.8	a	152	The Early Development of the Self-System
5.9	С	155	The Early Development of the Self-System
5.10	С	151-152	The Early Development of the Self-System
5.11	b	164	Early Socialization: Parenting and the
		10.	Development of the Self-System
5.12	a	157-158	Early Socialization: Parenting and the
			Development of the Self-System
5.13	d	160-162	Early Socialization: Parenting and the
			Development of the Self-System
Item Number	Correct Answer	Page #	Subject Heading
5.14	b	168	Conscience: The Beginnings of a Moral
			Self
5.15	b	168	Early Socialization: Parenting and the
			Development of the Self-System
5.16	b	168	Conscience: The Beginnings of a Moral
			Self
5.17	a	160	Early Socialization: Parenting and the
			Development of the Self-System
5.18	c	160	Early Socialization: Parenting and the
			Development of the Self-System
5.19	С	164-165	Early Socialization: Parenting and the
		10.100	Development of the Self-System
5.20	b	164-165	Early Socialization: Parenting and the
			Development of the Self-System
5.21	d	169	Applications
5.22	b	169-171	Applications
5.23	b	170	Applications
	1 ~	1.0	rr

5.24	a	171	Applications
5.25	d	171-172	Applications
5.26	b	171	Applications
5.27	b	170-171	Applications

5.28	b	151	The Early Development of the Self-System
5.29	d	160-162	The Early Development of the Self-System
5.30	b	171	Applications
5.31	a	169	Applications
5.32	С	172	Applications
6.1	С	177	Physical and Brain-Related Changes
6.2	a	177	Physical and Brain-Related Changes
6.3	d	179-180	Cognitive Development
6.4	a	177-181,	Cognitive Development
		203	
6.5	c	185	Cognitive Development
6.6	a	187	Cognitive Development
6.7	d	185,	Cognitive Development
		187-188	
6.8	a	187,	Cognitive Development
		190-191	
6.9	d	188-189	Cognitive Development
6.10	d	192	Cognitive Development
6.11	a	193	Cognitive Development
6.12	d	194-196	Cognitive Development
6.13	a	196-197	Cognitive Development
6.14	c	189	Cognitive Development
6.15	a	189	Cognitive Development
6.16	c	184-185	Cognitive Development
6.17	d	187	Cognitive Development
6.18	a	203	Applications
6.19	С	208	Applications
2.20	b	202	Social Cognition
6.21	d	187	Cognitive Development
6.22	a	186	Cognitive Development
6.23	a	202-203	Social Cognition
6.24	d	205-206	Social Cognition
6.25	b	203-204	Social Cognition
6.26	d	202-204	Social Cognition
6.27	b	191	Cognitive Development
6.28	b	204-205	Social Cognition
6.29	c	207-208	Applications

6.30	b	205-207	Applications
6.31	d	207-209	Applications
6.32	a	193-194	Cognitive Development
7.1	c	214-215	Self-Concept
7.2	a	218	Self-Concept
7.3	d	218	Self-Concept
7.4	a	218-219	Self-Concept
7.5	d	218	Self-Concept
7.6	d	219-220	Self-Concept
7.7	a	200-221	Self-Concept
7.8	c	219-220	Self-Concept
7.9	b	216-218	Self-Concept
7.10	d	216	Self-Concept
7.11	a	225	The Moral Self
7.12	b	224-225	The Moral Self
7.13	a	223-224	The Moral Self
7.14	d	229	The Moral Self
7.15	b	226	The Moral Self
7.16	С	226-227	The Moral Self
7.17	b	229	The Moral Self
7.18	a	230	The Moral Self
7.19	b	231	The Moral Self
7.20	a	232	The Moral Self
7.21	b	234-236	The Moral Self
7.22	С	234-235	The Moral Self
7.23	a	234-235	The Moral Self
7.24	d	235	The Moral Self
7.25	b	235	The Moral Self
7.26	С	235	The Moral Self
7.27	b	236	The Moral Self
7.28	d	240-242	Applications
7.29	a	233	The Moral Self
7.30	d	233	The Moral Self
7.31	С	233	The Moral Self
7.32	d	226-227,	The Moral Self
		237	
8.1	b	248	Sex Role Development
8.2	a	248-249	Sex Role Development
8.3	c	253	Sex Role Development
8.4	b	254	Sex Role Development
8.5	d	256-257	Sex Role Development
8.6	a	255	Sex Role Development

8.7	d	256	Sex Role Development
8.8	b	256	Sex Role Development
8.9	С	256-258	Sex Role Development
8.10	b	259	Sex Role Development
8.11	С	261	Sex Role Development
8.12	b	261	Sex Role Development
8.13	С	262-263	Sex Role Development
8.14	d	263	Sex Role Development
8.15	С	257	Sex Role Development
8.16	d	265	Peer Relationships
8.17	a	266-267	Peer Relationships
8.18	b	267	Peer Relationships
8.19	d	268	Peer Relationships
8.20	a	268	Peer Relationships
8.21	a	271	Peer Relationships
8.22	С	271	Peer Relationships
8.23	a	270-271	Peer Relationships
8.24	С	269	Peer Relationships
8.25	d	273	Peer Relationships
8.26	С	274	Peer Relationships
8.27	b	272	Peer Relationships
8.28	a	255	Peer Relationships
8.29	b	270-271	Peer Relationships
8.30	d	271	Peer Relationships
8.31	С	249	Sex Role Development
8.32	a	258	Sex Role Development
9.1	b	284	Physical Development
9.2	d	284-285	Physical Development
9.3	b	287	Physical Development
9.4	d	287	Physical Development
9.5	d	287	Physical Development
9.6	a	288	Physical Development
9.7	С	288	Physical Development
9.8	c	290	Physical Development
9.9	a	292	Physical Development
9.10	b	289	Physical Development
9.11	a	293	Physical Development
9.12	a	297-298	Physical Development
9.13	d	298	Cognitive Development
9.14	a	301	Cognitive Development
9.15	c	301	Cognitive Development
9.16	b	301	Cognitive Development
9.17	d	301	Cognitive Development

9.18	d	302	Identity Development
9.19	b	302	Identity Development
9.20	b	303-304	Identity Development
9.21	С	304	Identity Development
9.22	d	304	Identity Development
9.23	С	305-306	Identity Development
9.24	d	304-307	Identity Development
9.27	a	307	Identity Development
9.26	a	292	Physical Development
9.27	С	290-291	Physical Development
9.28	b	314	Applications
9.29	a	290-291	Applications
9.30	d	314	Cognitive Development
10.1	a	321	Framelessness and Autonomy: A Model of
			Adolescent Social Identity
10.2	a	322-323	Framelessness and Autonomy: A Model of
			Adolescent Social Identity
10.3	d	323	Framelessness and Autonomy: A Model of
			Adolescent Social Identity
10.4	С	324	The Structure of the Peer Network
10.5	a	325	The Structure of the Peer Network
10.6	b	325	The Structure of the Peer Network
10.7	a	328	The Role of Parents
10.8	b	329	The Role of Parents
10.9	d	329	The Role of Parents
10.10	a	331	The Role of Parents
10.11	b	325-326,	The Role of Parents
		330	
10.12	a	328-329	The Role of Parents
10.13	С	331	The Role of Parents
10.14	a	333	The Role of Parents
10.15	b	333	The Role of Parents
10.16	d	334-335	The Role of School
10.17	b	337-338	Risky Business
10.18	b	341	Risky Business
10.19	d	339-341	Risky Business
10.20	b	342-343	Risky Business
10.21	c	333	The Role of School
10.22	b	335-336	The Role of School
10.23	c	347	Applications
10.24	d	346-347	Applications
10.25	С	324	The Structure of the Peer Network
10.26	С	334	Leisure and Work

10.27	b	334	The Role of Parents
10.28	b	331	The Role of Parents
10.29	d	339	Risky Business
10.30	b	345	Applications
10.31	С	345-346	Applications
11.1	b	355	Physical and Cognitive Development in
			Young Adulthood
11.2	d	354	Physical and Cognitive Development in
			Young Adulthood
11.3	a	353-354	Physical and Cognitive Development in
			Young Adulthood
11.4	d	355	Physical and Cognitive Development in
			Young Adulthood
11.5	b	355	Physical and Cognitive Development in
11.6		256	Young Adulthood
11.6	a	356	Physical Development in Young
11.7	d	359	Adulthood Cognitive Development in Young
11./	a	339	Cognitive Development in Young Adulthood
11.8	d	360	Cognitive Development in Young
11.0	u	300	Adulthood
11.9	b	360-361	Cognitive Development in Young
		000001	Adulthood
11.10	d	360-361	Cognitive Development in Young
			Adulthood
11.11	d	361	Cognitive Development in Young
			Adulthood
11.12	c	361-362	Cognitive Development in Young
11.10		211 212	Adulthood
11.13	a	361-362	Cognitive Development in Young
11 14	1	262	Adulthood
11.14	d	362	Cognitive Development in Young Adulthood
11.15	d	365-366	Cognitive Development in Young
11.13	u u	303-300	Adulthood
11.16	b	366-367	Cognitive Development in Young
			Adulthood
11.17	a	366-367	Cognitive Development in Young
			Adulthood
11.18	a	366-367	Cognitive Development in Young
			Adulthood
11.19	b	365-366	Cognitive Development in Young
			Adulthood
11.20	d	365	Cognitive Development in Young
			Adulthood

11.21	b	366	Cognitive Development in Young Adulthood
11.22	d	367	Cognitive Development in Young Adulthood
11.23	С	368	Cognitive Development in Young Adulthood
11.24	a	368-369	Cognitive Development in Young Adulthood
11.25	С	371-372	Cognitive Development in Young Adulthood
11.26	a	371-372	Cognitive Development in Young Adulthood
11.27	d	368	Cognitive Development in Young Adulthood
11.28	b	358	Physical Development in Young Adulthood
11.29	d	368	Cognitive Development in Young Adulthood
11.30	С	373	Applications
11.31	d	355	Physical and Cognitive Development in
			Young Adulthood
11.32	b	375	Focus on Developmental Psychopathology
12.1	a	383	Lieben- To Love
12.2	a	383	Lieben- To Love
12.3	d	385	Lieben- To Love
12.4	d	384	Lieben- To Love
12.5	b	383	Lieben- To Love
12.6	d	383-385	Lieben- To Love
12.7	a	387	Lieben- To Love
12.8	a	383,	Lieben- To Love
		385-387,	
		391	
12.9	С	389	Lieben- To Love
12.10	b	389	Lieben- To Love
12.11	a	389	Lieben- To Love
12.12	d	389-390	Lieben- To Love
12.13	b	388-389	Lieben- To Love
12.14	b	395	Arbeiten- To Work
12.15	b	396-397	Arbeiten- To Work
12.16	С	397-398	Arbeiten- To Work
12.17	a	398-399	Arbeiten- To Work
12.18	a	400	Arbeiten- To Work
12.19	С	400	Arbeiten- To Work
12.20	С	402	Arbeiten- To Work

12.21	a	401-403	Arbeiten- To Work
12.22	d	404	Arbeiten- To Work
12.23	С	404-405	Arbeiten- To Work
12.24	c	406	Arbeiten- To Work
12.25	d	406	Arbeiten- To Work
12.27	d	407	Arbeiten- To Work
12.28	b	408-409	Applications
12.29	b	4.0	Applications
12.30	a	411-412	Applications
13.1	d	416	Middle Adulthood: Cognitive, Personality,
			and Social Development
13.2	d	417-418	Life Span Developmental Theory
13.3	b	419	Life Span Developmental Theory
13.4	a	419	Life Span Developmental Theory
13.5	d	419-420	Life Span Developmental Theory
13.6	a	419-420	Life Span Developmental Theory
13.7	С	418-419	Life Span Developmental Theory
13.8	d	421-422	Life Span Developmental Theory
13.9	b	421	Life Span Developmental Theory
13.10	b	420-422	Life Span Developmental Theory
13.11	a	424	Life Span Developmental Theory
13.12	a	423-424	Life Span Developmental Theory
13.13	С	425-426	Life Span Developmental Theory
13.14	d	428	Life Span Developmental Theory
13.15	b	428	Influences on Adult Development: Sources
			of Change
13.16	d	425	Influences on Adult Development: Sources
			of Change
13.17	b	423	Influences on Adult Development: Sources
12.10	1	107, 100	of Change
13.18	d	427-428	Influences on Adult Development: Sources
13.19	b	431	of Change Influences on Adult Development: Sources
13.19	U	431	of Change
13.20	b	447	Influences on Adult Development: Sources
13.20		777	of Change
13.21	d	436	Influences on Adult Development: Sources
10.21			of Change
13.22	d	437	Influences on Adult Development: Sources
			of Change
13.23	С	441	Influences on Adult Development: Sources
			of Change
13.24	a	442	Influences on Adult Development: Sources
			of Change

13.25	b	443	Influences on Adult Development: Sources of Change
13.26	С	444	Influences on Adult Development: Sources of Change
13.27	С	445	Influences on Adult Development: Sources of Change
13.28	d	446-447	Influences on Adult Development: Sources of Change
13.29	a	449	Influences on Adult Development: Sources of Change
13.30	c	451	Applications
13.31	b	452-453	Applications
13.32	c	453	Applications
14.1	С	459-460	Living Well: Stress, Coping, and Life Satisfaction in Adulthood
14.2	b	462	Life Satisfaction: What is a Well-Lived Life?
14.3	a	461-462	Life Satisfaction: What is a Well-Lived Life?
14.4	a	462	Life Satisfaction: What is a Well-Lived Life?
14.5	d	463-464	Life Satisfaction: What is a Well-Lived Life?
14.6	d	464-465	Life Satisfaction: What is a Well-Lived Life?
14.7	С	465	Life Satisfaction: What is a Well-Lived Life?
14.8	a	465	Life Satisfaction: What is a Well-Lived Life?
14.9	b	466	Life Satisfaction: What is a Well-Lived Life?
14.10	a	466	Life Satisfaction: What is a Well-Lived Life?
14.11	d	466	Life Satisfaction: What is a Well-Lived Life?
14.12	b	467	Life Satisfaction: What is a Well-Lived Life?
14.13	b	467-468	Life Satisfaction: What is a Well-Lived Life?
14.14	a	467-468	Life Satisfaction: What is a Well-Lived Life?
14.15	С	468	Life Satisfaction: What is a Well-Lived Life?
14.16	С	468	Life Satisfaction: What is a Well-Lived Life?

14.17	С	470	Life Satisfaction: What is a Well-Lived
			Life?
14.18	a	470	Life Satisfaction: What is a Well-Lived
			Life?
14.20	a	471	Life Satisfaction: What is a Well-Lived
			Life?
14.21	a	472	Life Satisfaction: What is a Well-Lived
1122		1-0	Life?
14.22	b	472	Life Satisfaction: What is a Well-Lived
1.4.22	1	472	Life?
14.23	d	473	Life Satisfaction: What is a Well-Lived
14.24		472 474	Life? Life Satisfaction: What is a Well-Lived
14.24	a	473-474	Life?
14.25	c	476	Life Satisfaction: What is a Well-Lived
14.23		470	Life?
14.26	c	476-477	Life Satisfaction: What is a Well-Lived
14.20		7/0-7//	Life?
14.27	a	476-477	Life Satisfaction: What is a Well-Lived
11.27		170 177	Life?
14.28	b	476	Life Satisfaction: What is a Well-Lived
			Life?
14.29	С	476-480	Applications
14.31	d	479	Applications
14.32	b	479	Applications
15.1	a	485	Aging Well
15.2	d	485	Aging Well
15.3	b	486	Aging Well
15.4	b	490	Aging Well
15.5	С	491	Aging Well
15.6	d	492-493	Aging Well
15.7	a	494	Aging Well
15.8	С	494	Aging Well
15.9	a	493	Aging Well
15.10	С	300	Aging Well
15.11	b	495-497	Aging Well
15.12	b	493-494	Aging Well
15.13	d	497	Aging Well
15.14	С	497	Aging Well
15.15	d	497-498	Aging Well
15.16	a	499	Aging Well
15.17	b	500-501	Aging Well
15.17	b	501	Aging Well
15.19		502-503	Experiencing Loss
13.19	c	302-303	Experiencing Loss

15.20	d	503	Experiencing Loss
15.21	С	504	Experiencing Loss
15.22	a	508-509	Experiencing Loss
15.23	d	509	Experiencing Loss
15.24	d	509-510	Experiencing Loss
15.25	b	510-511	Experiencing Loss
15.26	С	511	Experiencing Loss
15.27	a	495-496	Experiencing Loss
15.28	b	495-496	Experiencing Loss
15.29	d	495-496	Experiencing Loss
15.30	b	497	Experiencing Loss
15.31	a	516	Applications

Potential Answers for Essay Questions

Chapter 1 Essay Questions

33. Compare and contrast stage, incremental, and multidimensional models of development. What specific contributions does each perspective make to our knowledge of development? (pages 5- 16)

Stage, incremental, and multidimensional models of development are similar in that they attempt to explain a wide variety and breadth of behaviors. Stage theories, such at Piaget's theory of cognitive development, characterize development as a discontinuous process, whereas, incremental theories view change as a continuous process. Metaphorically, stage theories, conceptualize change as resembling a staircase. In contrast, incremental theories view change as more like a steadily rising mountainside. Stage theories are useful for addressing issues related to developmental readiness to learn. They also help us understand limitations associated with trying to accelerate an individuals' capacity to learn and mature. Stage theories focus on qualitative differences in mental processes and behavior, compared to incremental theories that emphasize quantitative changes.

Incremental theories are based on the assumption that developmental change is not marked by major reorganizations that affect many behaviors at once, as in stage theories. Rather, change is gradual and steady and specific to particular mental activities or behaviors. Incremental theories also differ from stage theories in the kinds of processes they assume to underlie psychological change, such as the kinds of processes involved in learning. For example, social learning theory and most information processing theories are among the incremental models available to explain development and how knowledge is acquired.

In the multidimensional model, development is considered to be the result of many causal components that impact all domains of development from cognitive to social. According to this model there are different layers and levels of interacting causes for behavior change: physical, biological, social, psychological and cultural. Changes at one level causes and is influenced by what happens at other levels. Thus, the relationships among causes are reciprocal. Bronfenbrenner's bioecological model is a good example of multidimensional model because it specifies how the following different levels of environment influence a person's development:

- 1. <u>Microsystem</u>: This refers to immediate environment where proximal processes are played out. For example family, school, neighborhood.
- 2. <u>Mesosystem</u>: Relations among microsystems. For example, parental involvement in school affects the child's education.
- 3. <u>Exosystem</u>: includes settings that may not directly interact with the child but will influence the child indirectly. The teacher's family life influences the teacher and thereby influences the child.
- 4. <u>Macro system</u>: This includes the customs and character of the larger culture that help shape the microsystem. For example, cultural attitudes toward senior citizens would influence the structure of the family and interactions with grandparents.

34. Create a case scenario using an example of a helping professional that describes the

process of reflective practice. (pages 1-3)

An experience counselor is working with a young adolescent who recently lost her best friend in a car accident. The counselor is an experienced grief counselor and knows what type of therapeutic techniques to guide the client through experiencing such a loss. The counselor has recently experienced the pain of loosing a close family member. She is very self-aware of her own feelings and when to self-disclose appropriate information to her client about her own grieving process. The counselor carefully self-monitors her own emotions related to death and dying and is able to appropriately share her life experiences with her client. The counselor has mastered reflective practice, which is a creative method of mastering the knowledge and skills base pertinent to one's profession, but goes beyond rote technical applications to generate new kinds of understanding and strategies of action. Her counseling approaches involves problemsolving strategies that depend on a deep understanding in fundamental knowledge germane to the field. A common challenge for counselors is that they come to the process with a base of personal life experiences and views, which can influence their ability to be objective. The best way to counselors to avoid misapplication of their personal views is by self-monitoring – being aware of their personal theories and recognizing that they are only one of a set of possibilities.

35. Explain why having a working knowledge of development or a "developmental template" is useful to helping professionals. (pages 23-25)

Helping professionals who emphasize development in their work bring an awareness that persons grow and change over time and that their capacities and concerns also shift over the life course. As noted in the text book, many writers have called for a rethinking of diagnostic taxonomies as well to make them more developmentally and sensitive. They claim that diagnostic classification systems need to include a comprehensive understanding of the way people grow and adapt, for better or for worse, to their changing circumstances. Lerner (1996) argues a developmental focus allows helping professionals to consider ways to support developmental transitions to later life stages by taking steps to promote a caring network.

Specific developmental theories such as Piaget's theory of cognitive development, Freud's psychosexual stage theory, and Kohlberg's moral development theory assist helping professionals to understand the developmental underpinnings of their profession and advocate for a contextualized perspective on client functioning. We can see that developmental knowledge is evident in the emerging field of **applied developmental science**, which has begun to synthesize and apply the findings of developmental psychology to the solution of real-world problems. Noam's (1992, 1998), takes a developmental and constructivist approach to the study of disorders in his therapeutic approach called clinical-developmental psychology, which blends developmental knowledge with clinical practice. Noam uses developmental knowledge as a kind of metatheory that helps counselors integrate the problems presented by the "person-insituation" and limits the reliance on treatments for isolated problems. Noam argues that the developmental approach is useful in addressing immediate difficulties, but has the additional benefit of anticipating what clients will need at later points in their growth. Knowledge of developmental science also helps clinicians distinguish normal developmental "bumps" or mishaps from real deviations in development, which allows them to make more effective interventions.

36. In the applications section of Chapter 1, several rules of thumb are provided to guide helping professionals incorporate developmental knowledge into their work. Choose three of the guidelines and, for each of these, provide either a) a detailed and specific example of how helping professionals incorporate the guideline in a practice setting, or b) a specific and detailed example of how you will incorporate this guideline into your practice. (pages 24-25)

One of the guidelines suggested in the text book is that helping professionals take a multidimensional view of developmental processes. With respect to the traditional dilemmas in development, it is most consistent with current research that helpers refrain from taking an either-or position in favor of a both-and stance in regards to understanding the importance of nature and nurture. It is suggested that having an awareness of the interacting contributions of genetics and environment can allow helpers to take a more reasoned and accurate view of problems. The current trend toward "over-biologizing" (Tavris, 1998) many kinds of physical and psychological conditions can lead people to the false belief that our genes control our behavior. In fact, they may produce tendencies for people to respond to environments in certain ways. One system, proposed by Sadler and Hulgus (1994), would incorporate three levels of symptom assessment into treatment planning. Examples of these three levels include:

- (1) syndromes related to personal history (such as early parental deprivation),
- (2) syndromes related to interpersonal environments (such as victimization or divorce), and
- (3) syndromes related to extrapersonal environments (such as job loss or systemic discrimination).

What these approaches share is the desire to shift the prevailing theoretical paradigm from a model of pathology "within the individual" to a more integrative model that incorporates critical developmental principles such as the importance of contextual features. For example, a counselor would be encouraged to not overly rely on biological theory to explain an adolescent's risk taking behaviors. Although the adolescent's temperament may influence her desire for novelty and risk-taking, her temperament and behaviors also influence her selection of peers. The situation becomes more complex because her peer group shapes her self-concept and identity.

One of the "rules of thumb" comes from Steenbarger (1991), who cautions against thinking about developmental progress as movement through a fixed set of stages that are the same for all people. Such an excessively rigid interpretation of problems does not account for the complexities of person—environment interactions. At the other extreme of the debate, some radical constructivist views abandon all sense of developmental stage progressions, which may be too extreme for the helper who needs to construct a developmental map of the client. Thus, the rule of thumb is to rely n an informed middle ground. For example, it may be useful to rely upon some stages of psychosocial development that not entirely dependent on chronological age and maturational attainments.

Another guideline to keep in mind is the scientific meaning of *theory*. A theory represents a synthesis of hypotheses that have been tested and supported by careful research, such as the theory of relativity or evolution. We can think of a theory as referring to one's personal opinion, such as one's opinion about the best way to counsel the elderly or explains why someone is extroverted is social situations. Scientific theories evolve and they can be disproved with the

accumulation of evidence. Skilled helping professionals need to keep themselves well informed about current research findings, but they must also avoid overgeneralizing from single studies and not rely too much on speculation.

Anther rule of thumb for effective helping professionals is to be selective about their sources of information they rely upon in their practice. We need to keep in mind that knowledge builds relatively slowly and is accumulated over time by repeated observations of similar results. Helping professional who take too simplistic of an approach to developmental issues can miss the complexities of interacting factors, including contextual and historical influences. They are also cautioned against making quick direct causal connections between experiences and outcomes that may make for an easy prediction but might misrepresent the phenomenon under study.

Finally, helping professionals need to be committed to ongoing education in the field. Counselors and other helping professionals need to keep an open mind and continually work to accommodate new information as they practice reflection in action. Thus, it is important to talk with colleagues, attend professional meetings and conferences, and read scientific journals within our profession.

Chapter 2 Essay Questions

31. Genes have their effects on the proteins and enzymes produced by the cell. Yet, there appear to be genetic influences on behavior. Take some example of a behavior or a behavioral disorder, and explain how genes operating at a cellular level could have any effect at the behavioral level. (pages 35-39)

Molecular genetics is the study of what genes do and how their products influence the body. Molecular geneticists study the cascade of biochemical changes that occur in the transmission and translation of DNA information to cells, a process called gene expression. We have learned a great deal about genetic science from the massive Human Genome Project, which is a large scale effort in molecular genetics that involved thousands of scientists around the world for 13 years (ending in 2003) and successfully mapped the sequence of chemical bases comprising all human chromosomes. An international consortium continues this work and has identified the locations of most of the coded genes on human chromosomes. One thing we have learned from molecular genetics to date is that complex human behaviors or behavioral tendencies are not often likely to be traced to the impact of a single gene or pair of gene alleles. As noted in the text book, most influences on behavior seem to be polygenic. A number of genes, if they are defective, can influence the development of mental retardation. In many cases, the defective genes seem to result in an important cell product being missing. For example, let us consider how a missing cell can impact a child's intellectual functioning. In the disorder called phenylketonuria (PKU), children are missing an important enzyme. Without the enzyme, an ingredient in food, called phenylalanine, cannot be metabolized. Unless the victim's diet is severely restricted, phenylalanine soon accumulates in the body and causes mental retardation. This example shows that a single missing cell product disrupts intellectual functioning. However, no single cell product is responsible for normal intelligence; rather, it is the result of the combined impact of a

large number of genes and their products.

A different but related are of study to molecular genetics is behavior genetics. Behavioral genetics seeks to explains if a behavior or characteristic varies from one person to another, how much of the difference is due to genetic influences? Behavior geneticists look for heredity explanations in such complex activities as television watching, work attitudes, shyness, cigarette smoking, and criminality. Their research tools involve measuring individual differences in behavior using interviews, questionnaires, standardized tests, and observational techniques. They apply these measures to special populations of people, such as twins and adoptees. They seek to identify behavioral variations that run in families and to figure out how much of the similarity among family members is due to shared genes or the environment.

32. Explain why it is important for a helping professional to be aware of the coaction of genes and environment. Be sure to include a definition of coaction, with examples. Then, provide a good example of how an understanding of coaction would be useful in counseling. (p. 48-49)

Coaction is bidirectional: Environments affect the action of genes, and genes affect the influence of environments. Genes influence how much impact any environmental factor is likely to have on the development of behavior. Thus, environmental factors can have different effects on people with different genotypes. For example, when children experience early and ongoing abuse, they often grow up to be violent adults. But not all children who suffer from mistreatment will later abuse others. We have learned from modern molecular and behavior genetic research that only a multidimensional or systems approach to the nature—nurture relationship is likely to capture its complexity. One such approach is Gottlieb's (1992) epigenetic model that assumes development is the result of interacting genetic and environmental factors, which are have complex interactions and occur at multiple levels of functioning. In this approach, genes, through their products, can affect an individual's neural activity; neural activity affects the individual's behavior; and behavior influences the external environment and the experiences that an individual is likely to have. At the same time, environmental influence behaviors which can alter neural activity and change genetic activity.

Let us consider the example of how much of irritability in adolescence is due to genetics. There is some evidence showing that the environment can socially mediate gene expression. Reiss and Neiderhiser's (2000) research provides us with an example that illustrates multiple levels of bidirectional influence. They studied adolescent social relationships and found that for some youth, qualities, such as irritability, that appear to have a heritable component, evoke negative reactions from other people with whom they interact. Their social environment becomes hostile, further supporting the expression of genetically influenced tendencies toward irritability. Yet these heritable tendencies can be modified by environmental circumstances that do not support their expression. The researchers further claim that most, but not all, parents, peers, teachers, and best friends react adversely to a difficult child. The "off-diagonal" responders—the ones who do not respond to provocations—may hold the key to the powerful suppression achieved by positive social environments on adverse genetic influences. Coaction is an important concept for helping professionals because it cautions us against making very simplistic explanations of attitudes and behaviors.

33. There are several principles that govern the effects of teratogens on the developing fetus. Describe these principles, giving examples. (page 54-56)

The fetus is surrounded by a placenta, an organ that develops with the fetus and exchanges blood products with the baby through the umbilical cord. Although the placenta allows nutrients to pass from the mother's blood to the baby's blood, it an can also allow the passage of harmful environmental substances and agents called teratogens. The first principle is that the type of damage done is related to the stage of development during which the mother is exposed to the teratogen. For example if a pregnant women is exposed to harmful substance during the fourth or fifth week of gestation when the major organs are laid down the result may be major structural malformation. Yet, if the same substance is exposed during the last months of pregnancy there is more likely to be neurobehavioral deficit then major structural malformation. A second principle is that the mother's and baby's genes play a role in sensitivity or resistance to a teratogen. Thus, not all developing organisms will be susceptible to teratogenic effects. A third principle is that adverse outcomes depend on dosage amounts. Finally, the negative effects of teratogens can be magnified if the fetus or infant is exposed to more than one risk factor. For example, mothers who take drugs and abuse alcohol during pregnancy also tend to have more stress and poorer nutrition. They may also experience greater amounts of poverty that can negatively impact their maternal lifestyle.

34. What advice could you provide a pregnant teenager in order to help her assure the health of her baby? (pages 54-59)

First, pregnant women need to monitor their stress levels. The increased levels of stress hormones will contribute to the development of the infant's neuroendocrine system. Researchers have found a relationship between maternal stress and neonatal hyperactivity and irritability. Also, as levels of maternal epinephrine rise, blood flow and thus oxygen flow to the fetus is reduced, affecting fetal development. Moreover, maternal stress can alter the environment of the developing fetus, thus impacting the developing brain and possibly leading to stress hyperreactivity in later life for the child.

Second, pregnant women need to understand the dangers associated with the ingestion of certain drugs and alcohol particularly during the early stages of pregnancy. There is research evidence showing that babies who are exposed to alcohol prenatally may be born with fetal alcohol syndrome (FAS), which is identifiable in its victims by virtue of their unique facial configuration (small head, widely spaced eyes, flattened nose, and so on). These children are also characterized by growth retardation, either pre- or postnatally, both in weight and length. Many organ systems can be affected but the most vulnerable seems to be the central nervous system. Of great concern is thte finding that children with FAS are likely to suffer from mental retardation and behavior problems. Children exposed to smaller amounts of alcohol prenatally do not necessarily have to meet the diagnostic criteria of FAS to exhibit deficits. Such children are said to exhibit fetal alcohol effects (FAE). Significant learning impairments are often found in children who have been prenatally exposed to alcohol even when they do not have the physical features or growth deficiencies of FAS children. Pregnant women need to understand that the absence of physical symptoms or structural malformations does not rule out serious cognitive limitations from

prenatal alcohol exposure.

Finally, in addition to stress and substance abuse, pregnant women need to understand the importance of good nutrition during pregnancy. Infants short on proteins or other essential vitamins and minerals during prenatal development can compromise a child's later physical, socioemotional, and intellectual development.