

Unit IX

Developmental Psychology

Overview

Unit IX tackles the enduring questions of how we develop cognitively, physically, and socially. The revealing research of Jean Piaget, Erik Erikson, Harry Harlow, and Mary Ainsworth, among others, is presented to frame the abilities and traits that develop in our attachment, cognition, and self-concept. Outside environmental influences such as parenting and peer groups are also reviewed. This unit reviews the infancy, childhood, adolescent, and adult phases of physiological growth and decline. A significant portion of the unit is devoted to examining the impact gender development has on the individual and attention is paid to the factors influencing teen sexuality and sexual orientation and identity.

Modules

45 Developmental Issues, Prenatal Development, and the Newborn

46 Infancy and Childhood: Physical Development

47 Infancy and Childhood: Cognitive Development

48 Infancy and Childhood: Social Development

49 Gender Development

50 Parents, Peers, and Early Experiences

51 Adolescence: Physical and Cognitive Development

52 Adolescence: Social Development and Emerging Adulthood

53 Sexual Development

54 Adulthood: Physical, Cognitive, and Social Development

Tip #9

Develop a Study Schedule or Routine

In Units IV and VI we talked about the importance of distributed practice and reinforcement in the development of study skills. To add on to those tips, it is a good idea to establish a study routine that you can abide by. You can use the calendar of study provided in Unit I or make a new one now. You should schedule time to study for each of your courses as well as time for a reward break. Each day when you return from school, you will know your routine and can stick with it. Take your peak energy times into account so that you can schedule rigorous study times then. Make certain to designate the few hours before your desired sleep time as a no-electronics time. Studies have shown that increased exposure to computers close to bedtime makes it more difficult to fall asleep. Use those last hours to read from your text or assigned book instead.

Module 45

Developmental Issues, Prenatal Development, and the Newborn

Before You Read

Module Summary

Module 45 begins the unit on development by posing three engaging questions about the way in which we grow cognitively, emotionally, socially, and physically. The module continues by presenting the basic physiology of prenatal development and gestational changes, as well as one primary teratogen that can impact development. A concluding discussion with numerous research findings on the abilities of newborns takes to task William James' famous assertion that newborns are a "blooming, buzzing confusion."

Before beginning the module, take a moment to read each of the following terms you will encounter. You may wish to make vocabulary cards for each.

Key Terms

developmental psychology	teratogens
zygote	fetal alcohol syndrome (FAS)
embryo	habituation
fetus	

While You Read

Answer the following questions/prompts.

45-1

1. Give an example from your life of how your genetic inheritance (nature) interacted with your experience (nurture) to influence your development.
2. Give an example from your life of a part of your development that was gradual and continuous. Then, give an example that was abrupt and discontinuous.

3. Which of your traits has persisted throughout your life? How have you changed as you have grown older?
4. Using developmental psychology's three major issues, create a thesis statement that discusses how they interact and explain a person's development.

45-2

1. Describe the changes that occur in prenatal development from conception through birth. Be sure to include the three distinct stages and the developments in each.
2. Define and give an example of a *teratogen*. Write down two additional examples of teratogens not mentioned in the text.
3. Why would maternal alcohol consumption have an epigenetic effect on the fetus?

45-3

1. Briefly list and describe the newborn's reflexes.
2. Discuss how habituation is used to understand a newborn's competencies.
3. What are some newborn competencies researchers have been able to demonstrate? Why do researchers spend time researching newborn competencies?

After You Read

Module 45 Review

Answer the following questions to see if you have mastered the basics.

Identify the prenatal stage of development: zygote (Z), embryo (E), or fetus (F) represented by the characteristics below.

- _____ 1. Two days after conception, cell division begins to occur.
- _____ 2. Entering the fourth month after conception, it weighs approximately 3 ounces.
- _____ 3. Cells begin to differentiate and specialize structure and function.
- _____ 4. At 40 days, the spine is visible and arms and legs begin to grow.
- _____ 5. In the third month, facial features, hands and feet have formed.

46-2

1. Based on the information in this section, how might you reply to a friend who insists he remembers events clearly from his first and second years of life?

After You Read

Module 46 Review

Complete the questions below to see if you have mastered the basics.

1. Define and explain the mechanism of *maturation*.

2. Define *infantile amnesia* and explain two studies of this phenomenon.

Module 47

Infancy and Childhood: Cognitive Development

Before You Read

Module Summary

Module 47 introduces the esteemed Jean Piaget and his research on cognitive development in children. His proposed four stages of cognition in children are fully explained. Exceptions to his stages, along with newer findings, are also discussed to show where portions of Piaget's theory could be expanded. The scaffolding and language work of Lev Vygotsky is briefly discussed as an alternative theory to Piaget's. Finally, a special Close-Up section dealing with autism spectrum disorder reviews the unique challenges in cognitive growth experienced by children with autism spectrum disorder.

Before beginning the module, take a moment to read each of the following terms and names you will encounter. You may wish to make vocabulary cards for each.

Key Terms

cognition
schema
assimilation
accommodation
sensorimotor stage
object permanence
preoperational stage

conservation
egocentrism
theory of mind
concrete operational stage
formal operational stage
autism spectrum disorder

Key Names

Jean Piaget
Lev Vygotsky

While You Read

Answer the following questions/prompts.

47-1

1. What did Jean Piaget teach us about how children reason differently from adults?

2. Explain how a child might assimilate and accommodate a schema for a car when presented with a truck.

3. Complete the chart below detailing Piaget's stages of cognitive development.

Stage	Approximate Age Range	Name and Description of Tasks to Be Mastered	Key Words
Sensorimotor			
Preoperational			
Concrete Operational			
Formal Operational			

4. What are two examples of how Piaget underestimated young children's competence in the sensorimotor stage?

5. Describe the research that showed symbolic thinking may appear at an earlier age than Piaget suggested.

6. Discuss the ways in which Lev Vygotsky's views on the cognitive development of children differs from Jean Piaget's.

7. How can Piaget's findings on children's cognitive development be used by babysitters to better understand the thoughts of small children?

47-2

1. What is one explanation for the increase in autism spectrum disorder (ASD) diagnoses and the decrease in the number of children considered learning disabled?

Module 48

Infancy and Childhood: Social Development

Before You Read

Module Summary

Module 48 explains the numerous studies conducted on attachment and parent-child bonds. Differences in attachment styles due to temperament and culture are discussed, as well as the negative impact on attachment when children are neglected, abused, or raised in adverse conditions. The contradictory findings on day care's effect on children and the onset and development of a self-concept each receive ample treatment in this module. The module concludes with a review of Diana Baumrind's research on parenting styles and their correlation to children's personality traits.

Before beginning the module, take a moment to read each of the following terms and names you will encounter. You may wish to make vocabulary cards for each.

Key Terms

stranger anxiety
attachment
critical period
imprinting
temperament

basic trust
self-concept

Key Names

Konrad Lorenz
Mary Ainsworth
Harry Harlow
Margaret Harlow
Diana Baumrind

While You Read

Answer the following questions/prompts.

48-1

1. How does stranger anxiety play a role in forming parent-infant attachment bonds?

3. Discuss the studies conducted on fathers' presence and later development of the child. How are these studies significant?

4. Explain the ways in which early attachment styles predict later personality traits.

5. According to Erikson, what can parents do to help establish a sense of basic trust in their infants?

48-3

1. Explain the cognitive and physical effects of attachment deprivation as illustrated by Romanian children housed in orphanages.

2. List specific outcomes correlated with being raised in abusive homes.

48-4

1. Discuss the research on the impact of day care on children's cognitive, social and physical growth. What can we learn from this research?

48-5

1. How do the terms *attachment*, *self-concept*, *self-image*, and *self-esteem* differ from one another?
2. In what way is self-concept linked to personality traits? How does this inform and contribute to people moving closer to their "ideal self"?

48-6

1. A teenager wants to extend her curfew and stay out later with her friends. Using the information on Diana Baumrind's research on parenting styles, create an imagined dialog exchange between the teen and
 - a. her authoritarian parent.
 - b. her permissive parent.
 - c. her authoritative parent.

4. The research conducted by Diana Baumrind showed that
 - a. parenting styles seem to be correlated with childhood social competence.
 - b. parenting styles seem to have no impact on childhood social competence.
 - c. children of authoritarian parents tend to have greater social skill and self-esteem.
 - d. parents who use a permissive style raise children with high self-esteem and self-reliance.
 - e. parenting styles cause certain childhood outcomes that can be predicted.
5. The studies on deprivation of attachment showed that
 - a. babies raised in abusive or neglectful homes are more bold, verbal and stubborn.
 - b. monkeys raised in isolation were more likely to mate frequently when with other monkeys.
 - c. intelligence scores were lower and anxiety symptoms were higher.
 - d. most children raised in abusive homes grow up to become violent criminals and abusive parents.
 - e. children who have survived wartime atrocities or physical abuse are more likely to show physical resilience and resistance to substance abuse and other health problems.

Module 49

Gender Development

Before You Read

Module Summary

Module 49 reviews some of the data and research on gender similarities and differences. The importance in our culture of gender roles and gender typing and their impact on development is the primary focus of the module.

Before beginning the module, take a moment to read each of the following terms and the name you will encounter. You may wish to make vocabulary cards for each.

Key Terms

gender

aggression

gender role

role

gender identity

social learning theory

gender typing

transgender

Key Name

Carol Gilligan

While You Read

Answer the following questions/prompts.

49-1

1. What statistics does the author include to support his contention that men are more aggressive than women? From your experience, do you agree or disagree with these statistics?
2. What examples does the author cite to support his statement that social power is inequitably distributed? Why might these differences persist in our modern world?

4. How do the terms *gender roles*, *gender typing*, *gender schema*, and *gender identity* relate and differ from one another?
5. How is gender identity different from sexual orientation?

After You Read

Module 49 Review

Complete the matching questions below to see if you have mastered the basics.

Terms

- _____ 1. gender
- _____ 2. gender role
- _____ 3. gender identity
- _____ 4. gender typing
- _____ 5. gender schema
- _____ 6. gender expression

Definitions

- A. the communication of gender identity through behavior or appearance
- B. the acquisition of a traditional masculine or feminine role
- C. a person's sense of being male or female
- D. the socially constructed roles and characteristics by which a culture defines male and female
- E. a set of expected behaviors for males or females
- F. a framework for organizing boy-girl characteristics

Module 50

Parents, Peers, and Early Experiences

Before You Read

Module Summary

Module 50 describes how early experiences can modify the brain and fleshes out the differing contributions to development made by peer groups and parents.

While You Read

Answer the following questions/prompts.

50-1

1. Briefly summarize Rosenzweig's work with rats and the implications of early experiences on brain development. How does this work address the intermingling between nature and nurture?

2. How can parenting impact one's behavior?

50-2

1. How does peer influence shape children's development?

2. In which areas do parents tend to have the greatest influence on their children's lives?
3. Summarize Howard Gardner's conclusions regarding the complementary nature of peer and parent influence on development.

After You Read

Module 50 Review

Complete the questions below to see if you have mastered the basics.

1. Using information from the module as evidence, support the claim that early experience affects brain development.
2. Using information from the module as evidence, compare and contrast the influence of peers versus parents on development.
3. How have your early experiences shaped who you are? How will they shape who you are 10 years from now?

Module 51

Adolescence: Physical and Cognitive Development

Before You Read

Module Summary

Module 51 reviews the major physical changes that occur during adolescence, as well as the cognitive and moral tasks involved in this changing time of life. The theories of Kohlberg are introduced briefly and a tie in to Piaget's work on cognitive development (discussed in Module 47) is included. The module concludes with a discussion of moral intuition and moral action.

Before beginning the module, take a moment to read the following term and name you will encounter. You may wish to make vocabulary cards for each.

Key Term

adolescence

Key Name

Lawrence Kohlberg

While You Read

Answer the following questions/prompts.

51-1

1. Discuss the two contradictory views of adolescence.

2. List the benefits and drawbacks to early physical maturation for boys.

3. List the benefits and drawbacks to early physical maturation for girls.

4. Describe the current trend and implications of research into the undeveloped prefrontal cortex of adolescents.

51-2

1. How might Kohlberg's stages of moral development be influenced by the work of Jean Piaget?

2. Explain how morality gradually changes from preconventional through conventional to postconventional stages, according to Lawrence Kohlberg.

3. Describe the decisions an individual might make when considering whether or not to cheat on an exam if they are in the
 - a. preconventional stage:

 - b. conventional stage:

c. postconventional stage:

3. In what way does the concept of moral intuition differ from Kohlberg's theory?

4. How does *moral intuition* differ from *moral action*?

After You Read

Module 51 Review

Identify the Kohlberg stage of morality best illustrated by the following examples.

Preconventional (Pre), Conventional (C), Postconventional (Post)

- _____ 1. Justin, age 5, does as his kindergarten teacher asks because he is afraid to get into trouble.
- _____ 2. Omar, age 12, crosses at the crosswalk rather than jaywalking because he knows drivers will be more likely to yield if he is crossing in the approved section of the street.
- _____ 3. Although it was illegal, Susan, age 52, cast a vote and was arrested and jailed.
- _____ 4. Despite a law forbidding it, Mohandas led a group of people to the ocean to collect and process salt.
- _____ 5. Lorraine, age 6, promises her Stepmom to always tell the truth and be kind to others because Lorraine knows she will get big hugs and praise from her.

Module 52

Adolescence: Social Development and Emerging Adulthood

Before You Read

Module Summary

Module 52 describes the social tasks and challenges of adolescence, primary among them the forming of an identity. Erik Erikson's classic work on psychosocial development is presented and a section on parents and peers discusses the role each plays on development of self. The module concludes with an introduction to a novel idea in the field of development, the emerging adult, and provides solid history for the suggested phase as well as framing it in the context of culture.

Before beginning the module, take a moment to read each of the following terms and the name you will encounter. You may wish to make vocabulary cards for each.

Key Terms

identity

social identity

intimacy

emerging adulthood

Key Name

Erik Erikson

While You Read

Answer the following questions/prompts.

52-1

1. Complete the chart below by filling in the issue for each stage and a real-life example that illustrates each stage.

Stage	Issue	Real-Life Example That Illustrates Stage
Infancy (to 1 year)		
Toddlerhood (1 to 3 years)		

Stage	Issue	Real-Life Example That Illustrates Stage
Preschool (3 to 6 years)		
Elementary school (6 years to puberty)		
Adolescence (teen years into 20s)		
Young adulthood (20s to early 40s)		
Middle adulthood (40s to 60s)		
Late adulthood (late 60s and up)		

2. Discuss the findings of research on intimacy and discuss the link between intimacy and happiness.

Module 53

Sexual Development

Before You Read

Module Summary

Module 53 reviews the biological and social aspects of our sexuality. From a primer on X- and Y-chromosome conception through the primary and secondary sex characteristic development of puberty, the module presents the basic biological facts of development. Exceptions to traditional sex development are discussed, as well as the recent studies on AIDS prevalence and prevention. A thorough discussion of the factors both contributing to and deterring teen sexual activity precedes a Close-Up on the hypersexualization of girls in our culture. Lastly, the issue of sexual orientation is presented and research into the environmental and biological influences on heterosexuality and homosexuality are introduced.

Before beginning the module, take a moment to read each of the following terms you will encounter. You may wish to make vocabulary cards for each.

Key Terms

X chromosome	secondary sex characteristics
Y chromosome	menarche
testosterone	AIDS (acquired immune deficiency syndrome)
puberty	sexual orientation
primary sex characteristics	

While You Read

Answer the following questions/prompts.

53-1

1. Explain how the father determines the sex of a baby.

2. Discuss the primary and secondary sex characteristics that develop during puberty for boys and girls. How are they alike? How are they different?
3. How do menarche and spermatarche allow for eventual sexual reproduction?

53-2

1. What are some of the ways that sexual development varies?
2. What are some of the challenges intersex individuals face in today's society? What is your opinion of doctors deciding that many intersex individuals will be female?

53-3

1. What protections do condoms offer against sexually transmitted diseases? How was the increased use of condoms effectively instituted in Thailand?

2. Discuss the current statistics on the prevalence of AIDS worldwide.

3. Discuss why the statement "oral sex is safe sex" is not true.

53-4

1. How have the reported rates of adolescent sex changed since the 1900s?

2. Discuss and explain the impact of the four environmental factors that contribute to teen pregnancy.

a.

b.

c.

d.

3. Explain four factors that seem to predict sexual restraint in teens.

a.

b.

c.

d.

4. Discuss the forces that lead to the hypersexualization of girls in our culture.

5. What are the repercussions of this hypersexualization and how can parents and teachers combat them?

6. How do video games specifically impact males' image of females?

53-5

1. . Discuss the different types of sexual orientation.

2. How has the view toward homosexuality changed over time? Why did the APA change their view of homosexuality in the 1970's?

3. List four environmental influences that have been shown not to impact homosexuality.

a.

b.

c.

d.

4. Discuss Simon LeVay's work on the brains of homosexual and heterosexual people.

5. Discuss in detail the three lines of evidence that suggest a genetic influence on sexual orientation.

6. What are two prenatal influences on sexual orientation?

Module 54

Adulthood: Physical, Cognitive, and Social Development

Before You Read

Module Summary

Module 54 concludes the unit with an overview of aging and the physical, social, and cognitive changes that mark the later part of life. The specific impact of age on memory is reviewed and the trends in people's self-confidence and satisfaction with their life are presented. The various ways in which humans come to terms with death are discussed and the module draws to a close with a reminder of Erik Erikson's final stage of integrity versus despair.

Before beginning the module, take a moment to read each of the following terms and names you will encounter. You may wish to make vocabulary cards for each.

Key Terms

menopause
cross-sectional study

longitudinal study
social clock

Key Names

Albert Bandura
Sigmund Freud

While You Read

Answer the following questions/prompts.

54-1

1. Identify the physical changes that occur in men and in women in middle adulthood.

2. Identify the physical changes in men and women in later life.

54-2

1. Interpret the information in Figure 54.2 as it relates to recall in older adults.
2. Interpret the information in Figure 54.3 as it relates to the differing abilities of recall and recognition in older adults.
3. What have cross-sectional and longitudinal studies shown regarding cognitive abilities in older adults?

54-3

1. Discuss the evidence refuting the idea of a midlife crisis.
2. Define the social clock and explain how the 'ticking' changes during adulthood.

3. Discuss the tasks involved in the adult commitment of love.

4. How are work and happiness related?

54-4

1. In what way do confidence and life satisfaction vary across life stages? What common myths regarding happiness and age are refuted by these findings?

54-5

1. List three findings from studies on grief and coping.

a.

b.

c.

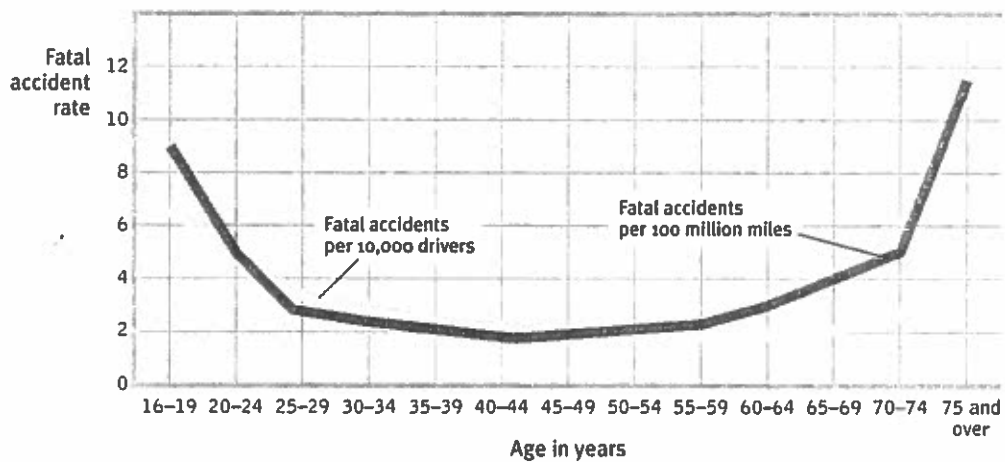
2. How does Erik Erikson's final stage of 85 factor into the last years of life?

After You Read

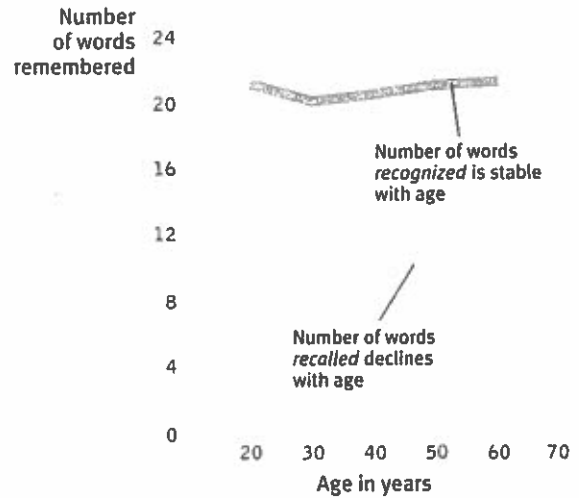
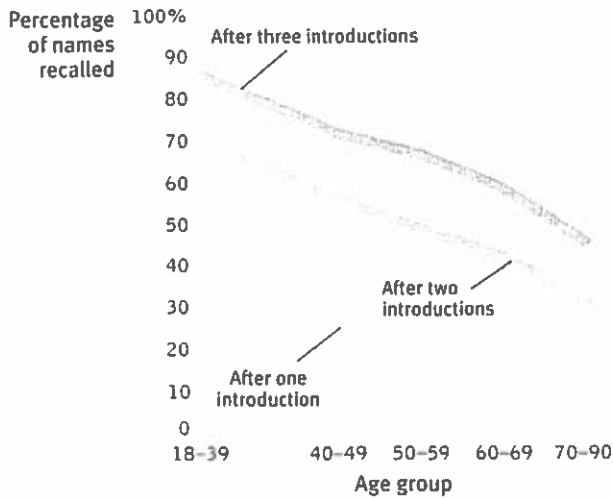
Module 54 Review

Answer the questions below to see if you have mastered the basics.

1. Interpret and summarize the information in the graph below.



2. Your 70-year-old grandmother has complained of a poor memory and is worried that she will no longer be able to remember things like the events of her life or names of new people she meets. Using the information from the two graphs below, what can you tell your grandmother about her declining abilities? In what way does the information on the graphs confirm your grandmother’s worries and in what way can the information give her comfort?



✓ Check Yourself Now that you have mastered the basics, work through the problem below to see if you can *synthesize, evaluate, and analyze* what you have learned.

Danielle is an 11-year-old 5th grader who is the youngest of four children and comes from a stable and loving two-parent home. She lives in suburban Georgia and walks to school each day. She enjoys the piano and has been taking lessons for five years.

Stephen is an 11-year-old boy abandoned by his parents as a child and raised in a foster home system, bouncing from family to family for the past four years. He currently lives with a couple fostering two other children. He listens to alternative music on his headphones each day as he rides the public bus to the school he attends in the economically depressed town of Smallville.



Before You Move On

Use the checklist below to verify your understanding of the unit's main points.

- Do I know how nature and nurture interact to determine behavior (for instance, temperament, personality)?
- Can I explain the process of conception and the stages of prenatal development?
- Can I define *maturation* and provide examples of maturation in milestones of motor and physical development?
- Can I describe the various research and outcomes on the topic of attachment?
- Can I label and provide examples for each of Piaget's stages of cognitive development?
- Can I compare and contrast Kohlberg and Gilligan's theories of moral development?
- Can I explain how parenting styles influence development?

Can I compare and contrast the physical and cognitive changes that occur

- in childhood?
- in adolescence?
- in adulthood?
- in elderhood?

- Do I understand how sex and gender influence socialization and development?

Can I identify key contributors in developmental psychology?

- Mary Ainsworth
- Diana Baumrind
- Erik Erikson
- Harry Harlow
- Carol Gilligan
- Lawrence Kohlberg
- Konrad Lorenz
- Jean Piaget
- Lev Vygotsky