# **Unit IX - Answer Key**

# **Developmental Psychology**

# Module 45 - Developmental Issues, Prenatal Development, and the Newborn

## While You Read

## 45-1

- 1. Answers will vary. Students may mention that their intelligence or personality is determined in part by their genes and in part by their environment.
- 2. Answers will vary. Students may mention that they grew steadily or perhaps grew 6 inches in only a few months. They may explain that they quickly came to understand abstract concepts like heartbreak or loss or love after a life experience.
- **3.** Answers will vary. Students may mention that their interests in sports, music, courses or food preferences which have remained stable or they may mention these same factors that have changed or perhaps they have lost interest in these over times.
- **4.** In terms of temperament, out of control 3-year-olds were more likely to become teen smokers, adult criminals or out of control gamblers.
- **5.** Social attitudes have been found to change over time and are quite impressionable during adolescence. Risk taking behavior generally reduces over time.

### 45-2

1. Zygotic: The fertilized egg undergoes cell division and specialization of structure and function. About 10 days after conception, the zygote attaches to the uterine wall.

Embryotic: This time period from about 2 weeks after fertilization through the second month, involves organ formation, the initiation of the heartbeat, arm and leg buds, facial features, etc.

Fetal: This stage last from about 9 weeks until birth. During this stage, organ development continues, brain growth continues, and the fetus becoming responsive to sound.

- 2. Newborn babies prefer their mothers voice to other voices as well as their mother's language(s). Newborn babies crying seems to be adapted to the language they heard in the womb, with French babies crying with a rising intonation and German babies crying with a falling intonation.
- **3.** A teratogen is an agent that can reach the embryo or fetus during prenatal development and cause harm. Some examples include viruses, drugs, and alcohol.
- 4. When a pregnant woman drinks, the alcohol enters her bloodstream as well as the fetus'. It depresses activity in both their central nervous systems. It also primes the woman's offspring to like alcohol and may put them at risk for heavy drinking and alcohol use disorder in their teens.

#### 45-3

1. Rooting reflex: When something touches their cheek, babies turn towards that touch, open their mouth, and vigorously root for a nipple.

Sucking: When a baby finds a nipple, it starts a coordinated sequence of other reflexes that compose the sucking reflex: tonguing, swallowing, and breathing.

Startle: The baby's arms and legs spring out away from the body, quickly followed by fist clenching and loud crying.

Grasping: When touched in the center of the palm, the newborn baby will close their hand around the finger, hand and grasp tightly. This may have served an evolutionary purpose to keep the baby close to their mother.

- 2. Habituation is a decrease in responding with repeated stimulation. Using habituation, researchers can tell when a newborn becomes bored because they have seen and gotten used to particular stimuli.
- 3. Newborns have a preference for faces, prefer sights and sounds that facilitate social responsiveness. Babies also prefer the smell of their mothers
  Studying competencies present at birth sheds light on innate behaviors and instincts.

## **After You Read**

#### **Module 45 Review**

- <u>Z</u> 1. Two days after conception, cell division begins to occur.
- <u>F</u> **2.** Entering the fourth month after conception, the developing baby weighs approximately 3 ounces.
- Z 3. Cells begin to differentiate and specialize structure and function.
- E 4. At 40 days, the spine is visible and arms and legs begin to grow.
- <u>F</u> 5. In the third month, facial features, hands and feet have formed.
- 1. Answers will vary, by may include: Soon-to-be mothers should understand that ingesting any types of drugs or alcohol can enter the bloodstream and harm the developing child. Alcohol reduces activity in the central nervous system and may place the child at great risk for developing alcohol dependence in the future. Ingesting alcohol during pregnancy may also

lead to low birth weight, birth defects, future behavioral problems and lower intelligence.

This may also have an epigenetic effect leaving the babies genes less able to deal with stress.

# Module 46 - Infancy and Childhood: Physical Development

### While You Read

### 46-1

- 1. While in the womb, a fetus' nerve cells develop at a rate of nearly one-quarter million per minute. The developing brain cortex overproduces neurons, with the number peaking at 28 weeks and then subsiding to a stable 23 billion at birth. During the ages of 3-6 there is rapid development in the frontal lobes. Throughout childhood, a "use-it-or-lose-it" pruning process shuts down unused links and strengthens others creating efficient neural pathways. The brains association areas concerned with higher-order thinking, memory and language are the last areas to fully develop in the brain.
- 2. Motor development requires specific neural communication, which is not possible until the brain processes have developed to allow it. The sequence is universal and biologically predetermined (barring extreme circumstances). Babies roll over before they sit unsupported, they crawl before they walk (usually at roughly 12 months old). Identical twins begin walking on nearly the same day.
- **3.** In Africa and the Caribbean countries, caregivers massage and exercise babies which can accelerate learning to walk.

- 1. Answers will vary but should address infantile amnesia, the concept of constructed memories and source amnesia.
- 2. Carolyn Rovee-Collier found that when babies realized that their movements led to a mobile over their head moving, they continued to kick to move the mobile. The learning lasted into the

next day demonstrating that the children remembered the mobile, but did not transfer to other, different mobiles. However, if they returned to original mobile a month later, they again began kicking. Adults claiming to have no knowledge of a language they knew when they were very young demonstrated knowledge of subtle sound differences in those languages up to age 40.

#### After You Read

# **Module 46 Review**

- 1. Maturation is biological growth that enables orderly, sequential changes in behavior, relatively uninfluenced by environmental factors.
  - As the brain myelinates, additional cognitive abilities appear. No amount of reinforcing or environmental incentives can draw this behavior from the organism prior to it reaching the maturational stage that allows for it. Sitting, crawling, walking, and running all happen as the physical maturation allows for it.
- 2. Infantile amnesia is the inability to recall memories before approximately age 4.
  - Although some constructed memories based on photos and stories can be "recalled," true conscious recollection of early life events seems limited as the explosive growth of neurons and still developing brain areas may "wipe out" earlier memories.
  - Some studies have shown that traces of sound contrasts from childhood languages may also exist in our nervous system although we do not consciously "remember" the language.
  - Some studies have shown that infants can remember and are processing memories, but they do not endure over time.

# **Module 47 - Infancy and Childhood: Cognitive Development**

## While You Read

#### 47-1

- 1. He showed us that children reason differently from adults— "in wildly illogical ways about problems whose solutions are self-evident to adults." While he was writing intelligence questions for the Binet intelligence exams, he found that children of the same age often got the same questions wrong. This peaked Piaget's interest in studying how children develop cognitive abilities.
- 2. A schema, or mental concept, for a car might have the typical characteristics: four wheels, a car body, windshields, seats, a steering wheel, etc. Any vehicle fitting that description would be assimilated into the schema. But a truck, which has slightly different characteristics (size of body or tires, pickup bed, fewer seats. etc.) would not fit the car schema and the child would have to accommodate, or modify, the schema to fit this new example. (Hint: To remember the difference between assimilation and accommodation, use the double-letters from each word. Assimilation (stays same), Accommodation (creates change).

3.

	Approximate	Name and Description of Tasks to Be	
Stage	Age Range	Mastered	Key Words
Sensorimotor	Birth–2 years	experiencing the world through senses and	senses
		actions (looking, hearing, touching,	motor skills
		mouthing, and grasping)	object permanence

		object permanence—becoming aware that	
		objects continue to exist even when not	
		perceived (around 8 months of age)	
Preoperational	About 2 to 6	representing things with words and	egocentrism
	or 7 years	images(symbolic thinking); using	symbolic thinking
		intuitive rather than logical reasoning	pretend play
			theory of mind
Concrete	6 or 7 to 11	thinking logically about concrete events;	conservation
Operational	years	grasping concrete analogies and	mathematical
		performing arithmetical operations	transformations
		mastering conservation—the principle that	
		quantities remain the same despite changes	
		in form	
Formal	About 12	abstract reasoning involving imagined	Abstract and
Operational	through	realities and symbols	hypothetical thinking
	adulthood	hypothetical thinking	
		deducing consequences	

**4.** Baby physics: Babies will look longer at an unexpected and unfamiliar scene that seems to violate the laws of physics.

- Baby math: Infants will look twice at objects that are grouped incorrectly into math problems.
- 5. Children are shown a model of a room with a hidden mini stuffed dog behind the mini couch, then they must find an actual stuffed dog behind a normal-size couch in a real room that mimicked the model. Two-and-a-half-year-olds could find the mini toy but could not find the actual toy in the adjacent room. However, 3-year-olds could make that connection, could think of the model room as a symbol for the real room and run right to the couch to find the stuffed animal.
- 6. While Piaget emphasized how the child's mind grows through interaction with the physical environment, Vygotsky emphasized how the child's mind grows through interaction with the social environment. Children learn, he reasoned, from following the roles of their caregivers or mentors. Instead of looking at the world as "young scientists" as Piaget suggested, Vygotsky believed that children acted as "young apprentices" who were influenced by adults who interacted with the children and told them about how the world works.
- 7. Parents and teachers scaffold information by gradually giving the children more difficult tasks to accomplish and helping them only as much as they need assistance. The zone of proximal development describes the area between what children can and cannot do by themselves. Parents or teachers will assist until the child can take over on their own. Answers may vary, but an example may be, parents may help children with some words while they are learning to read, but eventually the child will be able to do this independent of their parent's assistance.
- **8.** While the stages he developed seem to reflect the correct order of cognitive development in children, today psychologist believe that he may have underestimated the abilities of object permanence or conservation. In addition, his stage theory is criticized as today most cognitive

psychologists believe that cognitive development takes place on a continuum rather than a distinct and separate stages.

9. Answers will vary but should show understanding of the various age ranges and the suggested competencies of each age according to Piaget. Tying these into age-appropriate activities for small children should be included in the answer. Teachers, parents and babysitters should not assume that children understand the world and use the same logic as adults, they should try to build off of what children already know based on how the child currently sees the world.

- 1. Perhaps it is just a relabeling of children's disorders as there has been a reduction in the number of cases of cognitive and learning disabilities diagnosed.
- 2. Characteristics associated with ASD include social deficiencies and repetitive behaviors.

  Those with autism spectrum disorder often have difficult reading faces and have trouble understanding the emotions of others. Some people with ASD have normal intelligence and exceptional skill or talent in a specific area, but lack social and communication skills and tend to become distracted by minor and unimportant stimuli; others with ASD are unable to use language at all or develop language later than other children. Because the disorder runs on a spectrum, cases can be quite mild to very severe and the social abilities of these individuals can vary widely.
- **3.** Prenatal environments such as maternal infection of inflammation, psychiatric drugs or stress hormones may influence the development of Autism.

- **4.** Despite a fraudulent study suggesting that childhood vaccines may play a role in the development of autism, this is not true.
- **5.** When an identical twin is diagnosed with ASD, it is 50 to 70 percent more likely that the cotwin will be diagnosed as well. A younger sibling of a child with ASD is also at a heightened risk. A link has also appeared in brain-function studies.
- **6.** There may be under connectivity in the fiber tracts that connect the frontal lobe to the back which integrate visual and emotional synchronicity. Lack of functioning in mirror neurons may also play a role in the development of the disorder.

#### After You Read

# **Module 47 Review**

<u>C</u> 1.	Seven-year-old Amal understands that when a cookie is broken into three smaller
portions,	it is still only one cookie, not three cookies. Concept described:
_conserva	ation
<u>F</u> 2.	Thirteen-year-old Julie is contemplating the different ways humans express love
and wond	ering if feeling love is innate. Concept described: _abstract
thinking_	
<u>S</u> 3.	One-month-old Na He puts everything she can find into her mouth, her toes, the
string on	her clothing, even the stuffed elephant her grandmother gave her.
<u>P</u> 4.	Three-year-old Matthew is talking with his aunt on the telephone and when she
asks if he	enjoyed preschool today, he excitedly nods his head up and down. Concept
described	: _egocentrism

- S 5. Five-month-old Emma cries when you hide her play toy under the blanket in front of you, but smiles delightedly when you pull it back out again. Concept described: \_object permanence\_\_\_\_
- **6.** Answers may vary, but an example may be that you could help by talking with them and making an effort to say "hello". If they do not notice your emotions, you can be very clear with them by saying, "I am feeling sad today". While these individuals may have a more difficult time recognizing emotions and socializing with others, they still want to fit in just like all other students.

# Module 48 - Infancy and Childhood: Social Development

#### While You Read

#### 48-1

- 1. Being afraid of strangers and clinging to the parent/stepparent increases the bond. It also is likely to provide physical an emotional security for the child.
- 2. They were able to show that attachment was based on comfort contact (the physical closeness between an infant and caretaker), rather than the biological element of feeding. The implications of this finding were helpful in understanding infants' bond with their caregiver. This research helped psychologists understand that the caregiver provides a secure base from which children can explore to world, but return to when anxious or frightened.
- 3. He studied how baby ducklings imprint on the first moving creature (or nonliving object) in order to attach. Children, unlike ducklings, do not imprint; however, they do become attached during a sensitive period through mere exposure—being around the caregiver a lot fosters fondness and bonding.
- 4. Critical periods are times when particular behaviors or stimuli need to be present in order for human growth to proceed. These apply to all species, not just ducklings. Humans, however have a less precisely defined attachment period than goslings, this is known as a sensitive period in which the mere exposure effect suggests we become more fond of those with whom we spend much time.

#### 48-2

1. In her strange situation design, she separated the primary caregiver from the infant and noted the infant's response. She was able to identify several different types of attachment styles,

- which she called secure and insecure. She believed the parenting style impacted the attachment style.
- 2. Children with a secure attachment style play comfortably in their mother's presence, happily exploring their environment. When their mother leaves, they become distressed and seek physical contact with her when she returns. Children with an insecure attachment style are less likely to independently explore their surroundings and may act clingy with their mother. When she leaves, they either cry loudly and remain upset or seem indifferent to her coming and going.
- 3. Ainsworth found that sensitive, responsive mothers who noticed what their babies were doing and responded accordingly and had infants who developed a secure attachment. Insensitive, unresponsive mothers who attended to their babies when they felt like it but ignored them at other times often had insecurely attached infants.
- 4. Identical twins tend to display similar temperaments and parents report that their children are quite different despite being raised in similar environments. Some babies are difficult (irritable, intense and unpredictable), while others are easy (cheerful and relaxed), these differences may elicit different parenting styles. These temperaments also seem to persist overtime.
- **5.** Across 100 studies worldwide, a father's love and acceptance have been comparable to a mother's love in predicting their offspring's health and well-being. In one large study, those whose fathers were most involved in parenting tended to achieve more in school.
- **6.** Parents should be sensitive and loving in order for the child to form a lifelong attitude of trust (the belief that the world is predictable and reliable) rather than fear and inconsistency

7. People who report secure relationships with their parents, tend to enjoy secure friendships. Children with sensitive and responsive mothers tend to thrive socially and academically. In the anxious style of insecure attachment, individuals crave acceptance but are constantly vigilant for rejection. The avoidant style maintain distance from others and decrease commitment in romantic relationships.

- 1. Attachment deprivation resulted in reduced brain development, lower intelligence scores, abnormal stress responses and quadruple the rate of attention deficit and hyperactivity disorder (ADHD) than found in children placed into quality foster care settings.
- 2. Children raised in abusive homes exhibit hypersensitivity to angry faces, cowardly adult behavior, increased risk for health problems, psychological disorders, substance abuse, criminality, and greater risk of depression.48-4
- 3. The place a dab of color on the child's nose and set the child in front of a mirror, if the child attempts to remove the color they have self-awareness and realize the individual in the mirror is them.
- **4.** Self-concept is an understanding and assessment of who we are. Self-image is how we see ourselves often in relationship to others.
- **5.** They tend to be more confident, independent, optimistic, assertive and sociable

1.

- **a.** The authoritarian parent will insist that the child come home at the same time because "rules are rules" and the curfew will not be extended.
- **b.** The permissive parent will allow the child to set the curfew for themselves or not enforce the one that they have set.
- **c.** The authoritative parent will discuss the potential change with the child. If there is a good reason for the curfew extension and the parent knows that the child will be safe and responsible, they may extend the normal curfew
- 2. Children with authoritative parents have higher self-esteem, self-reliance, and social competence.
  - Children with authoritarian parents tend to have less social skill and self-esteem.
  - Children with permissive parents tend to be more aggressive and immature.
- 3. Children's traits may influence parenting—warm, loving children may draw out authoritative parenting. Perhaps competent parents and their competent children share a gene for that characteristic.
- **4.** The research that has been done with parenting styles is correlational research and correlation cannot provide causation. The only research method that can demonstrate cause and effect is an experiment.
- 5. Answers will vary, but may include Modern Western cultures prefer raising children to be independent, although 150 years ago Western cultural values placed greater priority on obedience, respect, and sensitivity to others.
  - Many Asian cultures prefer raising emotionally close children—a strong sense of family self.

# **After You Read**

# **Module 48 Review**

- 1. d. comfort and security.
- 2. d. attachment forms during a critical period.
- 3. b. attachment styles may be a result of a mother's interaction with her child.
- **4. a.** parenting styles seem to be correlated with later social competence.
- 5. c. intelligence scores were lower and anxiety symptoms were higher.

# **Module 49 - Gender Development**

#### While You Read

- 1. Sex is biologically determined while gender is determined by psychologically identifying as a male or female and is more fluid with some individuals identifying as neither gender or others changing their gender identity over their lifespan.
- 2. Girls typically enter puberty about a year earlier than boys and live roughly five years longer. Women also express emotions more than men but are more prone to depression, eating disorders and anxiety then men. Men are at greater risk for dying from suicide, or developing alcoholism or autism. Men are also more likely to be diagnosed with ADHD, antisocial personality disorder and color blindness.
- 3. In surveys, men admit to more aggression (pertaining to harmful physical aggression). In experiments, men have been more likely to deliver painful electric shocks. Also, the male-to-female arrest ratio for violent crime. Men also tend to express more support for war as well as hunting and fishing
  - Answers will vary but may include that boys get into more physical altercations than girls
- 4. While aggression is defined as any physical or verbal act intended to harm someone physically or emotionally, relational aggression is a physical or verbal act of aggression intended to harm someone's relationship or social standing. Women are slightly more likely to engage in relational aggression than men. Answers will vary, but can include an act in which someone makes a post on social media questioning if someone is cheating in a relationship. Because many people can see the post immediately, this post whether true or not may come to be seen as the truth and may ruin the persons relationship.

- 5. Gilligan believes that females are less likely to view themselves as separate individuals and are more concerned with forming social connections than men. In children's play, boys typically form large groups, but girls usually play in smaller groups, often with one friend, more imitative of social relationships. Males communicate more often while standing side-to-side and focus more on problem-solving than on making personal connections. The average teen girl sends double the number of text messages of the average teen boy. Women use more family related words in Facebook posts and men use more work-related posts.
- 6. Women "tend and befriend" while men value freedom and self-reliance more.
- 7. By age 50, most parenting related gender role differences disappear. Men become less domineering and more empathetic and women become more assertive and self-confident.

#### 49-3

- 1. Men are seen as being more take-charge, while women are seen as being more aggressive
- 2. Male physicians on average make \$211, 526 per year while female physicians on average make \$150,953 per year.
- **3.** Men are more directive, telling people what to do and how to do it. Women are more democratic, welcoming others input in decision-making.

#### 49-4

1. Gender roles vary over time and place: In nomadic societies, there is little division of labor by sex, in agricultural societies, children have typically been socialized into more distinct gender roles. Australia and Scandinavian countries offer the greatest gender equity.

- 2. In Western cultures, men are expected to initiate dates, pay for meals, and stay at work longer. In other cultures, this is not necessarily so.
- 3. Social learning theory suggests that people learn appropriate gender role behavior by observing and imitating the behavior of a same gender adult (often a parent). This behavior is then rewarded or punished based on the consistency or inconsistency with traditional gender role behaviors and repeated or discontinued as a result.
- **4.** Gender roles are the set of expectations about a social position and the behaviors accompanying it for that gender.
  - Gender identity is how we ourselves describe our gender—our own sense of being male or female.
- 5. Androgynous gender behavior involves displaying behavior which is typical of both males and females. Answers will vary but may include a male who enjoys ballet dancing while also enjoying race care driving. People who are more androgynous are more self-accepting more resilient and experience less depression.
- 6. They may indicate that boys do not wear dresses or girls cannot have short hair. By about age 3, children come to understand that gender schemas help to organize typically male or female behaviors and generally act accordingly.
- 7. The view themselves in terms of their expressed rather than birth gender, generally indicating that their bodies do not match the gender that they feel.
- **8.** In American survey results 71 % of respondents indicated that they saw "some" or "a lot" of acceptance of gay men and 85% indicated the same for lesbian women, while the acceptance rate for transgender individuals was only 18%. After You Read

## After You Read

# **Module 49 Review**

## Terms

- <u>D</u> 1. gender
- <u>E</u> **2.** gender role
- <u>C</u> 3. gender identity
- B 4. gender typing
- <u>F</u> 5. gender schema
- A 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 male and female characteristics

# **Module 50 - Parents, Peers, and Early Experiences**

#### While You Read

- 1. Rosenzweig et al. raised some young rats in solitary confinement and others in a communal playground. When they analyzed the rats' brains, those raised in the enriched environment usually developed a heavier and thicker cerebral cortex. After 60 days in the enriched environment, the rat's brain increased by 7-10% and the number of synapses mushroomed by nearly 20%.
  - Both nature and nurture sculpt our synapses. After brain maturation provides an abundance of neural connections, experience acts on them.
- 2. Touch and stimulation seem to be important for rats and humans. As seen earlier in the chapter, children in Romanian orphanages without much touch from a caretaker, develop lower intellectual abilities. Premature babies who have skin-to-skin contact with their mother's sleep better, experience less stress and show better cognitive development 10 years later.
- 3. Because our brains are not set at birth, interactions in the environment can physically alter the brain as seen in the biological bases of behavior unit. Those who navigate London's labyrinth like streets by taxi have a larger posterior hippocampus than a control group. Those individuals who have had hemispherectomies still function normally and those who practice a sport continue to strengthen neural networks each time they practice.
- 4. For personality, environmental influences account for less than 10% of children's differences.
  Parents should be given less credit for children who turn out and less blame for those who do not.

- 1. A child generally imitates the accents of their peer rather than their parents. Children will typically eat a food that they dislike when placed around a table with others that like the food.
- 2. As children mature, they seek to fit in with their groups and are very much influenced by others of their peer group. Peers are more important when it comes to engaging in certain behaviors such as smoking or sports. Peer tend to come together over shared interests.
- **3.** Parents are important in determining where to live and therefore have a degree of control over the peer group and those the child will typically interact with.

#### After You Read

#### **Module 50 Review**

- Answers will vary but may include data from Rosenzweig's research with rats in which rats
  with an enriched environment developed a thicker cerebral cortex and an increase in
  synapses.
- 2. Peers have a greater influences one gets older and spend more time with their peer group.

  However, peer influence can be seen even in young children. Preschoolers who disdain a certain food will eat it if put at a table with a group of children who like it; children who hear English spoken with one accent at home and another at school will adopt the accent of their peers; teens who smoke typically model friends who smoke.

# Module 51 - Adolescence: Physical and Cognitive Development

#### While You Read

- Adolescence can be seen as a time of "storm and stress" when peers' social approval is
  imperative, the sense of self is in flux, and the feeling of alienation from parents is greatest.

  However, adolescence can also be seen as a time of vitality without the cares of adulthood, a
  time of rewarding friendships, heightened idealism, and a growing sense of life's exciting
  possibilities.
- 2. Some girls start their growth spurt as early as 9, while for some boys, this does not occur until age 16. Girls today are experiencing puberty earlier than in the past which has generally been associated with increased body fat and increased hormone mimicking chemicals in the diet as well as increased stress due to family disruptions.
- **3.** Boys who are stronger and more athletic tend to be more popular, self-assured, and independent. However, they are also at higher risk for alcohol use, delinquency, and premature sexual activity.
- **4.** Girls who physically mature early may be out of sync with their emotional maturity and their friends' physical development and experiences, and they may begin associating with older adolescents and may suffer teasing or sexual harassment.
- 5. Research suggests that the adolescent brain is still not finished myelinating and the frontal lobes—the ones that control judgment, impulse control, and long-term planning—are unformed. Selective pruning is occurring which creates more efficient neural networks. This research is being used in courts to impact sentencing of minors, and in the day-to-day explanation of behavior that is seen as "adolescent." What this research doesn't address is the

multitude of teens who act responsibly, plan for the future, and make sound judgments, nor the many adults who act irresponsibly and impulsively. The frontal cortex may not be totally developed until the mid-twenties at which point impulse control increases and sensation seeking decreases.

**6.** Answers will vary but might include a response in support because of the lack of impulse control and development in the prefrontal cortex, or against because by the time individuals are teens, they should be responsible for their actions.

## 51-2

- 1. Piaget believed that children's moral judgment builds on their cognitive development and Kohlberg agreed. His progressive stages of moral reasoning align with the cognitive changes Piaget suggested in his stages. As they reach the formal operational stage, they use their abstract reasoning to compare reality to ideals and understand hypothetical reasoning.
- 2. According to Kohlberg, preconventional morality is a stage of childhood and is characterized by obeying rules to avoid punishment. If a child thinks they will be caught and punished for stealing a toy, they will not take it.

Conventional morality is considered to frame the early adolescent years, where laws are upheld to gain social approval or social order. A child may tell his mother that "he could have taken the toy" but decided not to as a way of winning her approval.

The final stage, postconventional, is thought to be the realm of the adults whose actions reflect belief in basic rights and self-defined ethical principles. The individual will not steal something if it goes against their personal morals and values. They are not worried about punishment or what others think, rather they want to live up to their personal beliefs.

- **3. a.** Will I get in trouble?
  - **b.** What are others doing? Is the group cheating? Does this society only work if we all agree not to cheat?
  - **c.** What do I think about the ethics of cheating? Is it fair to others who have studied hard if I cheat on the exam?
- **3.** Haidt posits that morality is more impulsive and driven by emotions, gut feelings and intuitions and less by reasoning and thinking, as Kohlberg suggested.
- **4.** Moral intuition is how we feel about a situation; moral action is what we do about it. People might report that they would save five people on a track if a train was coming towards them, but not actually take action when presented with a similar situation.
- 5. In Walter Mischel's now infamous marshmallow test, children were offered either one marshmallow now of two marshmallows later. Those who delayed gratification and waited for the second marshmallow are likely to display this trait later in life as well. These individuals are less likely to become involved with gambling, smoking or delinquent behaviors.

#### After You Read

#### **Module 51 Review**

- Pre 1. Justin, age 5, does as his kindergarten teacher asks because he is afraid to get into trouble.
- C 2. Omar, age 12, crosses at the crosswalk rather than jaywalking because he knows drivers will be more likely to yield if his teacher or his mother drive by when he is crossing the street properly, they will provide praise for his good behavior.

<u>Post</u>	3.	Although it was illegal, Susan, age 52, cast a vote and was arrested and
jailed.		
Post	4.	Despite a law forbidding it, Mohandas led a group of people to the ocean
to collect	t and pr	rocess salt.
Pre	5.	Lorraine, age 6, promises her Stepmom to always tell the truth and be kind
to others	becaus	e Lorraine knows she will get big hugs and praise from her.
6 Answers	will va	ry but examples follow Preconventional: I would steal the money if nobody

**6.** Answers will vary, but examples follow Preconventional: I would steal the money if nobody was going to see me and there was no way I would get caught and punished.

Conventional: I would pick up the money and turn it in to my teacher so she will think I am a good person.

Postconventional: It is not right to take another person's money and I know the person it belongs to. I would pick up the money and return it to the rightful owner.

# **Module 52 - Adolescence: Social Development and Emerging Adulthood**

# While You Read

**52-1** 

1.

		Real-Life Example That Illustrates Stage
		Answers will vary, but a sample answer
Stage	Issue	has been provided for each stage.
Infancy (to 1 year)	Trust vs. mistrust	When I cry do my parents come to
		comfort or feed me, if so I will learn
		that the world is a dependable place, if
		not I may develop mistrust of those
		around me.
Toddlerhood (1 to 3	Autonomy vs.	Can I feed myself without the help of
years)	shame and doubt	my parents? If so, I may develop
		autonomy, but if not allowed or unable
		to complete tasks independently, I may
		start to doubt my abilities.
Preschool (3 to 6 years)	Initiative vs. guilt	I try to start games with my brother, if
		he plays along with my plans to play
		school, I may develop initiative. If I
		feel bad for because I do not want to
		play what other children do, I may
		develop guilt.

Elementary school (6	Competence vs.	In 3 <sup>rd</sup> grade, I realize that I am a good
years to puberty)	inferiority	reader and I feel competence. If I feel
		like all of my classmates are passing me
		up academically, I may experience
		inferiority.
Adolescence (teen	Identity vs. role	I realize that I would like to major in
years into 20s)	confusion	theatre and hang around with many
		other people involved in the theatre, I
		have found my identity. If, however, I
		cannot find my unique interests and
		keep changing my mind about my
		major, I may experience role confusion.
Young adulthood (20s	Intimacy vs.	If in my early 20s, I find the love of my
to early 40s)	isolation	life and a good group of friends, I may
		experience intimacy, but if I cannot find
		someone to share my thoughts and
		hopes with, I may experience isolation.
Middle adulthood (40s	Generativity vs.	In my 30s, I have children and feel like
to 60s)	stagnation	I am getting promoted in my job or, I
		feel stuck in my job and like I am in a
		rut and experience stagnation.

Late adulthood (late 60s	Integrity vs. despair	In later adulthood, I look back on my
and up)		life and determine if I contributed
		something important to the next
		generation or if I lived selfishly.

- 2. They are happiest when they are with friends and least happy when they are alone
- **3.** Intimacy is the ability to form emotionally close relationships. Those who enjoy high-quality relationships with family and friends tend also to enjoy similarly high-quality romantic relationships, which equates with health and happiness.

## 52-2

- 1. While conflict increases between parents and teens during adolescence, most is bickering about small trivial household issues. Most teens report liking their parents and generally getting along with them
- 2. In teen calls to hotline counseling services, peer relationships have been the most discussed topic. Teens are herd animals—they talk, dress, and act more like their peers than their parents. What everyone is doing, they do.
- 3. Answers will vary, but may include that they can stand up to the bully, sit with someone at lunch who is eating alone or be certain to be careful with the words one and to consider people's feelings.

#### 52-3

1. Emerging adulthood is the time from 18 to the mid-twenties where many people have not yet settled or assumed full adult responsibilities, but are no longer adolescents. People in this

stage feel "in between." They may be unable to afford their own place and may still be emotionally dependent on their parents, but in other ways such as having full-time employment or having finished their schooling the see themselves as "adults".

# **After You Read**

# **Module 52 Review**

Stage		Example
<u>D</u> 1.	trust versus mistrust	A. a mother of three coaches her daughter's
	autonomy versus shame	lacrosse team
and doub	t	B. a teenager dyes her hair and tries out a new
_G_ <b>3.</b>	initiative versus guilt	look
<u>F</u> 4.	competence versus	C. a toddler chooses his own clothes and dresses
inferiorit	у	himself
<u>B</u> 5.	identity versus role	D. a newborn infant cries and receives comfort
confusion	n	and food from a caregiver
<u>H</u> 6.	intimacy versus isolation	E. a retired professor reflects on knowledge she
_A_ 7.	generativity versus	tried to pass on to the next generation.
stagnatio	n	F. a third-grader independently completes a
<u>E</u> 8.	integrity versus despair	math worksheet in school
		G. a preschooler grabs a broom and helps her
		father clean the kitchen floor

# **Module 53 - Sexual Development**

#### While You Read

- 1. The father provides the 46th chromosome (along with 22 other chromosomes), which is not unisex—either another X chromosome for a girl, or a Y chromosome for a boy. The presence of the Y chromosome triggers a "switch" that initiates the development of the testes and the production of the masculinizing hormone testosterone (which females also produce, but in lower quantities).
- 2. Boys experience height growth a few years after girls, then the reproductive and external genitalia (primary sex characteristics) which are necessary for reproduction develop as well as secondary sex characteristics which begin to develop at puberty but which are not necessary for reproduction such as facial hair and deepened voice in boys, breasts and hips in girls, and pubic and underarm hair in both sexes.
- 3. Menarche is the first menstrual period, which signifies the readying of the female reproductive system. Spermarche is the first ejaculation in boys which often occurs during sleep. While that doesn't mean a boy has sperm that can fertilize an egg, it does signify the body's preparation to reproduce.
- **4.** Atypical hormone exposure or sensitivity may cause atypical fetal development—intersex individuals are born with combinations of male and female physical features.
- 5. Society almost demands that one choose to be either a male or a female—the pressure to undergo surgery, the laws affecting occupation, sports participation, college admissions, etc. all impact an intersex individual. Answers will vary, but should address the challenges either

to facing early life without a clear gender assignment or to having gender reassignment surgery in which the wrong gender is selected.

#### 53-2

- 1. Condoms offer only limited protection against skin-to-skin STIs such as herpes, but reduce other risks. Thailand's condom use soared from 14 to 94 percent; during this time the annual number of bacterial STIs plummeted from 410,406 to 27,362.
- 2. 1.2 million people died from AIDS in 2012. Africa is home to two-thirds of those infected with HIV.

## 53-3

#### 1.

- **a.** Minimal communication about birth control: Many teens are uncomfortable discussing this with parents, peers, mentors, etc. But teens who have the most communication with parents, and are in an exclusive relationship with good communication, are more likely to use contraceptives.
- **b.** Impulsivity: In one survey, 72 percent of sexually active 12- to 17-year-olds said they regretted having had sex. Sometimes teens are overcome by the passion of the moment and engaging in sexual activity without the use of contraception which may lead to pregnancy.
- c. Alcohol use: Sexually active teens are typically alcohol-using teens. Those who use alcohol prior to sex are less likely to use condoms—by depressing the brain centers that control judgment, inhibition, and self-awareness, alcohol disarms normal restraints.

d. Media norms of unprotected promiscuity: An average hour of prime-time television contains 15 sexual acts with partners who are usually unmarried, with no prior relationship, and few communicated any concern for birth control or STIs. The more sexual content adolescents view, the more likely they are to perceive their peers as sexually active, to develop sexually permissive attitudes, and to experience early intercourse.

## 2.

- **a.** High intelligence: Those with higher intelligence scores often delay sex, perhaps because they understand the consequences.
- **b.** Religious engagement: Actively religious teens tend to wait until adulthood or in a committed relationship before engaging in sexual behavior.
- **c.** Father presence: Close family attachments, particularly with fathers, is linked to decreased sexual activity in girls under age 16.
- **d.** Participation in service learning programs: Teens who are volunteers tend to delay sexual activity, though it is unclear why.
- 3. An analysis of the 60 top-selling video games found 489 characters, 86 percent of whom were males. The female characters were more likely than the male characters to be hypersexualized—partially nude or revealingly clothed, with large breasts and tiny waists. Which creates an unrealistic standard in the mind of males and may lead to less satisfying relationships.

## 53-4

1. homosexual: attraction to members of our own sex

heterosexual: attraction to members of the other sex

bisexual: attraction to members of both sexes

2. Because of a lack of acceptance of homosexual and bisexual behavior in some area, many report feeling socially isolated or upset that others believe they can simply opt to change their sexual orientation. Nonheterosexual teens report lower self-esteem and high rates of anxiety and depression.

3.

- **a.** Homosexuality is NOT linked to problems in a child's relationship with parents.
- **b.** Homosexuality does NOT involve a fear or hatred of people of the other sex.
- **c.** Homosexuality is NOT linked with levels of sex hormones in the blood.
- **d.** Homosexuality is NOT linked with a childhood experience of molestation, seduction, or sexual abuse.
- **4.** There is no evidence that those who report being homosexual are more likely to be smothered by love from their mothers or have distant fathers. Most children raised by gay or lesbian parents are straight and in cases of individuals born as boys but raised as girls because of medical trauma, the individuals keep their original sexual orientation. Peer influence has little to now effect on sexual orientation.
- 5. LeVay studied sections of the hypothalamus taken from deceased heterosexual and homosexual people and found that a hypothalamus cell cluster was reliably larger in heterosexual men than in women and homosexual men.
- **6.** Twin studies: Identical twins are somewhat more likely than fraternal twins to share a homosexual orientation.

Fruit fly studies: Lab experiments have altered a single gene and changed the flies' sexual orientation and behavior.

Family studies: Homosexual men tend to have more homosexual relatives on their mother's side than on their father's.

7. A critical period for brain development seems to fall between the middle of the second and fifth months after conception, and exposure to the hormone levels typically experienced by female fetuses during this period may dispose a male or female fetus to be attracted to males later in life.

The mother's immune system may play a role: After each pregnancy with a male fetus, the maternal antibodies may become stronger and may prevent the fetal brain from developing in a typical male pattern. Female fetuses exposed to high levels of testosterone are more likely to experience same sex desires. Straight women and gay men tend to outperform straight men on remembering objects spatial locations.

**8.** Lesbians cochlea's and hearing systems develop somewhere in between men and women's. Gay men tend to be overall shorted than heterosexual men, while lesbians tend to be heavier than straight females. Gay men's special abilities are more similar to those of females.

#### After You Read

#### Module 53 Review

1.

- **a.** Condoms offer limited protection against skin-to-skin STI's such as herpes but do reduce other risks. They are 80 percent effective in preventing transmission of HIV.
- **b.** Abstinence

- 2. Answer should include information on the prosocial impacts on teen sexual abstinence, such as high intelligence, religious engagement, father presence, and participation in service learning programs. Compared to information on the antisocial impacts on teen sexual promiscuity such as: minimal communication about birth control, guilt related to sexual activity, alcohol use, and mass media norms of unprotected promiscuity.
- 3. With sexual orientation, the impact of nature—genetics and brain structures, prenatal hormones, and the evidence of homosexuality in other species—seems the greatest.
  Environmental influences thought to have impacted sexual orientation (childhood abuse, domineering mothers, etc.) have not been supported with research, neither has conversion therapy, which seeks to change someone's sexual orientation.

# Module 54 - Adulthood: Physical, Cognitive, and Social Development

### While You Read

- 1. In middle adulthood, men and women experience a gradual decrease in fertility and sexual activity. Menopause occurs for women at roughly age 50, for men sperm count and testosterone levels decrease, muscle mass also decreases in both genders.
- 2. From 1950-2016, life expectancy has increased from 46.5 year to 71 years (and beyond 80 in some countries). Women outlive men by an average of 4.7 years. By age 100, women outnumber men 5 to 1.
- **3.** Tips of chromosomes called telomeres wear down with age, activities such as smoking, obesity or stress can accelerate the rate of this aging. In addition, those who suffer frequent abuse or bullying experience shortened telomeres.
- 4. Visual sharpness diminishes as well as distance perception and adaption to light changes.
  Muscle strength, reaction time and stamina are reduced as well as smell, hearing and touch.
  The pupil shrinks and the lens becomes less transparent, reducing the level of light that reaches the retina.
- **5.** The immune system is weakened, making older adults more susceptible to ailments such as cancer or pneumonia. However, because of an accumulation of anti-bodies, those over 65 suffer fewer short term ailments such as common flu and cold viruses.
- **6.** The blood-brain barrier breaks down beginning in the hippocampus decreasing memory ability and a net loss of brain cells begins. Frontal lobes also begin to atrophy, making some adults more impulsive and similar to adolescents in behavior.

7. Physical exercise enhances muscles, bones and energy and helps prevent obesity and heart disease. Exercise may even help slow the onset of Alzheimer's disease. Exercise also promotes neurogenesis in the hippocampus.

#### 54-2

- 1. Recalling new names, introduced once, twice or three times is harder for older adults.
- 2. The ability to recall new information declined during early and middle adulthood, but the ability to recognize new information did not.
- 3. They have identified mental abilities that do and do not change significantly as people age—especially in the last three or four years of life, cognitive decline accelerates. Age is less a predictor of memory and intelligence than is proximity to death.
- **4.** Terminal decline refers to the steep cognitive decline shortly before death.

- 1. A series of small strokes, a brain tumor or alcohol use can progressively damage the brain as can heavy midlife smoking.
- 2. The disease first strikes memory, and then reasoning. Eventually, the person becomes emotionally flat and disorientated, disinhibited and incontinent.
- 3. Alzheimer's is caused by a loss of brain cells and neuron which produce acetylcholine.

  Plaque forms on the neuron tips where synaptic communication generally takes place.
- **4.** While there is no certain way to prevent the illness, one can remain physically and mentally active through activities like reading, running and lifting weights.

#### 54-4

- Unhappiness, job dissatisfaction, marital dissatisfaction, divorce, anxiety, and suicide do not surge during the early forties. The idea of a "midlife crisis" seems to be more myth than reality.
- 2. The social clock is the definition of the "right time" to leave home, get a job, marry, have children, retire, etc. It varies from era to era and culture to culture. Many prefer being out of sync with the social clock, which has come to be more flexible that in earlier decades.
- **3.** The tasks involved in the adult commitment of love include having similar interests and values, sharing emotional and material support, and having intimate self-disclosure.

4.

- Those who live together may be initially less committed to the ideal of enduring marriage.
- 2. They may become even less marriage supporting while living together.
- It is more awkward to break up with a cohabitating partner than a dating partner, leading some cohabitating partners to marry someone they otherwise would not have married.
- 5. At least a five-to-one ratio of positive to negative interactions
- **6.** Happiness is about having work that fits your interests and provides you with a sense of competence and accomplishment.

#### 54-5

1. From the teens to midlife, people typically experience a strengthening sense of confidence and self-esteem. In later life, as death approaches, life brings economic instability, cognitive

and physical decline, friends and family members dying or moving away. Studies show, however, that the over-65 group is not unhappy and positive feelings grow after midlife; older adults have fewer problems in their social relationships and are less angry, stressed, and worried, although they do experiences smaller social networks and more loneliness. Older adults become more attentive to positive news.

2. Moods are less extreme and more enduring, as one ages they become less of an "emotional roller coaster".

## **54-6**

## 1.

- a. Terminally ill people do not go through identical predictable stages, such as denial before anger.
- **b.** Those who express the strongest grief immediately do not purge their grief more quickly.
- **c.** Bereavement therapy and self-help groups offer support, but there is similar healing in the passing of time, support of friends, and the act of giving support and help to others.
- 2. Erik Erikson's final stage of integrity—a feeling that one's life has been meaningful and worthwhile—is important in the last years of life. Choosing not to feel despair over a life lived can affirm life.

## **After You Read**

#### **Module 54 Review**

1. The older a person is in years, the more fatal accidents in cars, particularly when measured by miles driven.

2. Your grandmother may not be able to remember names of new people she meets as readily as she did when she was younger, but in the graph above, there is indication that if the name is repeated three times, she will still have almost a 50 percent chance of remembering the name. And, although she may have difficulty recalling new information in her seventies, the graph above shows that she won't experience much change in ability to recognize new information.

## **✓** Check Yourself

Erikson's theories of psychosocial development

- Both Danielle and Stephen are 11 and would be in Erikson's fourth stage—industry versus
  - inferiority—where school and social interactions play an important role in children developing a sense of pride in their accomplishments and abilities. Danielle may be receiving supportive messages from her peers in her stable school environment and developing a strong sense of her own abilities. Stephen may be grappling with his role as he moves from home to home and may develop feelings of inferiority as he relates to the children around him.
- Maturation
  - Both children may be experiencing maturation—the orderly sequence of biological growth—in a normal way. It is possible that the environment Stephen has grown up in may have impacted his maturation if he experienced abuse or deprivation which may delay or stunt the natural maturation process.
- Influence of peers versus parents
   Danielle's parents' stability has provided a solid base for Danielle to learn about
   responsibility, orderliness, charitableness, and ways of interacting with authority figures. Her

peer group, which likely hasn't changed in her time in school, provides Danielle with ways to

learn to cooperate and invent new styles of interaction. Stephen has not had the benefit of a stable parenting model and thus may not have had the opportunity to learn the things they can teach. His peer group is shifting each time he moves, and thus, he may not be able to establish the close bonds that help him learn.

#### Gender roles of their culture

As a girl, Danielle may feel pressure to take on the gender roles of her culture. Perhaps she will experience media influences that suggest her worth lies in her use as a sexual object, or she will be guided to become more nurturing and less competitive. As a boy, Stephen may feel pressure to compete, become more domineering and unexpressive.

# Physiological changes of puberty

At age 11, Danielle may experience menarche—the start of her first period—she may be developing breasts and her hips may be starting to grow. At 11, Stephen may experience spermarche—his first ejaculation—his voice may be deepening, and he may be developing pubic and facial hair. Stephen is likely to have a few years until puberty officially begins, while Danielle may be starting puberty within the next year.

## • Ainsworth's theories of attachment

Ainsworth might offer that Danielle experienced a secure attachment as an infant and thus will likely be able to have more secure relationships as a growing child. Stephen, having been abandoned by his parents, may actually have developed an insecure attachment and have a greater fear of failure and a more difficult time forming strong, intimate relationships later in life.

• Diana Baumrind's research on parenting styles

If Danielle's parents are raising her in an authoritative manner, they may be encouraging open discussion about the rules and expectations they have and explain the reasons for those rules. Danielle may have high self-esteem, self-reliance, and social competence as a result. If Stephen's parents—the many foster parents he has had—raise him in the same manner, it may help to counteract the turbulent and disruptive upbringing he has had. If he is raised in an authoritarian manner, it will likely exacerbate the problems he may already have, decreasing his social skill and self-esteem.