# Theories and Causes

## **Chapter Summary:**

There are many factors and processes, which may influence child and family disturbances (e.g., biological, psychological, familial, cultural). The study of the etiology of childhood disorders is a consideration of how different variables interact to produce a particular outcome. An integrative approach allows for many different theories and models to contribute insights into human behavior. The developmental psychopathology perspective provides a general framework of studying childhood disorders and emphasizes the role of developmental processes, and the influence of multiple, interrelated events in guiding both abnormal and normal development. Importantly, the developmental psychopathology perspective stresses that an understanding of normal development is necessary in order to appropriately understand abnormal development. Biological perspectives examine how children's brain development is influenced by genetics, neuroanatomy, and maturation rates. Brain development and environmental experiences interact as a child's brain structure develops, with development continuing throughout a person's lifetime. Neural plasticity, genetics, brain structures, the endocrine system, and neurotransmitters all play significant roles in brain function. Psychological perspectives examine emotional, behavioral and cognitive influences on abnormal behavior. Emotional reactivity and regulation, as well as temperament and personality, play a role in the emotional development of the child. Behavioral and cognitive perspectives emphasize children's learning and interpretation of their environment. Three major approaches that follow behavioral or cognitive-behavioral models include Applied Behavior Analysis (ABA), classical conditioning, and social learning and cognition theories. Family and cultural perspectives view the child's social and environmental situations as influential factors. Knowledge about a child's attachment level and family relationships is essential in understanding behavior. A health promotion view recognizes that many causes interact together within a child's environment, and this perspective is emphasized within the context of understanding abnormal child psychology.

# **Chapter Outline:**

#### I. Theoretical Foundations

- The study of abnormal child behavior requires an understanding of developmental processes and of individual and situational events that can influence the course and direction of a particular child
- Theories allow us to predict behavior based on samples of knowledge

 The study of the etiology of childhood disorders considers how biological, psychological, and environmental processes interact to produce outcomes over time

## A. Underlying Assumptions

- 1. Abnormal development is multiply determined we must look beyond current symptoms and consider developmental pathways and interacting events that, over time, contribute to the development and expression of a particular disorder
- 2. The child and the environment are interdependent and interact dynamically the child and the environment are both active contributors to adaptive and maladaptive behavior (called the "transactional" or "relational" view)
- 3. Abnormal development involves continuities and discontinuities, with both quantitative and qualitative changes in patterns of behavior over time

## **B.** An Integrative Approach

1. Abnormal child behavior is best studied from a multi-theoretical perspective

#### **II.** Developmental Considerations

 Adaptational failure is the failure to master or progress in accomplishing developmental milestones

### A. Organization of Development

- 1. Implies an active, dynamic process of continual change and transformation
- 2. Sensitive periods are windows of time during which environmental influences on development are enhanced
- 3. The attempt to understand influences on abnormal child development is made easier by considering the fact that development proceeds in an organized, hierarchical way

### B. Developmental Psychopathology Perspective

- 1. Developmental psychopathology is an approach to describing and studying disorders of childhood and adolescence in a way that stresses the importance of developmental processes and tasks
- 2. The developmental psychopathology perspective is viewed as a macroparadigm
- 3. To understand maladaptive behavior, one must view it in relation to what is considered normative

#### III. Biological Perspectives

• A neurobiological perspective considers brain and nervous system functions as underlying causes of psychological disorders

#### A. Neural Plasticity and the Role of Experience

- 1. The brain shows neural plasticity (i.e., malleability; use-dependent anatomical differentiation) throughout the course of development
- 2. Experience plays a role in brain development, with transaction occurring between ongoing brain development and environmental experiences; these experiences may include early care-giving
- 3. Maturation of the brain is an organized, hierarchical process with brain structures changing and growing through the life span

4. As the brain is shaped by early experiences, consequences of traumatic experience may be difficult to change

#### **B.** Genetic Contributions

- 1. Any trait a child has results from an interaction of environmental and genetic factors
- 2. Very few specific genetic causes have been isolated or identified as the underlying cause of child psychopathology
- 3. Genes produce tendencies to respond to the environment in certain ways, but do not determine behavior
- 4. Behavioral genetics investigates possible connections between genetic predispositions and observed behavior through familial aggregation studies and twin and adoption studies
- 5. Molecular genetics offer more direct support for genetic influences on child psychopathology
- 6. Molecular genetics methods directly assess the association between variations in DNA sequences and variations in a particular trait or traits
- 7. Conclusions from behavioral geneticists are that genetic contributions to psychological disorders come from many genes that each make relatively small contributions

### C. Neurobiological Contributions

- 1. Brain Structure and Function Different areas of the brain regulate different functions and behaviors, with the limbic system, basal ganglia, cerebral cortex, and frontal lobes of particular interest to researchers of psychopathology
- 2. The endocrine system regulates certain processes in the body through the production of hormones; it is closely related to the immune system, and therefore is especially implicated in health- and stress-related disorders
- 3. The hypothalamus and pituitary and adrenal glands make up the regulatory system known as the hypothalamic-pituitary-adrenal (HPA) axis, which has been implicated in several disorders, especially anxiety and mood disorders
- 4. Neurotransmitters are like biochemical currents of the brain that make connections between different parts of the brain; changes in neurotransmitter activity may make people more or less likely to exhibit certain behaviors. Neurotransmitters most commonly implicated in psychopathology include serotonin, benzodiazepine-GABA, norepinephrine, and dopamine.

## IV. Psychological Perspectives

#### A. Emotional Influences

- 1. Emotions are critical to healthy adaptation in that they serve as internal monitoring and guidance systems that are designed to appraise events as being beneficial or dangerous, as well as provide motivation for action
- 2. Children may have difficulties in emotion reactivity or emotion regulation:
  - a. Emotion reactivity individual differences in threshold and intensity of emotional experience, which provides clues to an individual's level of distress and sensitivity to the environment

- b. Emotion regulation involves enhancing, maintaining, or inhibiting emotional arousal, often for a particular purpose of goal
- 3. Temperament shapes the child's approach to the environment and vice versa. Three primary dimensions of temperament have relevance to the risk of abnormal development: positive affect and approach, fearful or inhibited, and negative affect or irritability

#### B. Behavioral and Cognitive Influences

- 1. Applied Behavior Analysis (ABA) explains behavior as a function of its antecedents and consequences (reinforcement and punishment)
- 2. Classical conditioning explains the acquisition of deviant behavior on the basis of paired associations between previously neutral stimuli and unconditioned stimuli
- 3. Social learning considers the influence of cognitive mediators on behavior, as well as the role of affect and the importance of contextual variables in the etiology and maintenance of behaviors
- 4. Social cognition relates to how children think about themselves and others, resulting in the formation of mental representations of themselves and others

## V. Family, Social, and Cultural Perspectives

• Ecological models describe the child's environment as a series of nested and interconnected structures

#### A. Infant-Caregiver Attachment

- 1. Attachment theory emphasizes the evolving infant-care-giver relationship, which helps the infant regulate behavior and emotions, especially under conditions of threat or stress
- 2. Children develop internal working models of relationships based on early relationships with caregivers. Four patterns of attachment styles, which are believed to reflect different types of internal working models, have been identified: secure, anxious-avoidant, anxious-resistant, and disorganized

### B. The Family and Peer Context

- 1. Increasingly, the study of individual factors and the study of the child's context, including family and peer relationships, are being seen as mutually compatible and beneficial to both theory and intervention
- 2. Family system theorists study children's behavior in relation to other family members

# **Learning Objectives:**

- 1. To outline three main underlying assumptions of abnormal child psychology
- 2. To explain why an integrative approach to child psychology is important
- 3. To define neural plasticity and explain how nature and nurture work together to influence brain functioning

- 4. To identify some of the structures of the brain and the functions that they perform
- 5. To name some of the major neurotransmitters and describe their functions and roles in psychopathology
- 6. To consider how emotions can influence abnormal behavior
- 7. To describe the dimensions of temperament that may lead to abnormal development
- 8. To compare and contrast some of the major behavioral and cognitive theories of abnormal child psychology
- 9. To describe how attachment and family systems influence children's development
- 10. To explain the health promotion view of child development

## **Key Terms and Concepts:**

adaptational failure attachment behavioral genetics brain circuits continuity cortisol developmental cascades developmental psychopathology discontinuity emotion reactivity emotion regulation epigenetic epinephrine etiology family systems frontal lobes gene-environment interactions (GXE) health promotion hypothalamic-pituitary-adrenal (HPA) axis interdependent molecular genetics neural plasticity nonshared environment organization of development sensitive periods shared environment social cognition

social learning

temperament transaction

Π 4	T 4		
est	Item	C	•
		. •	-

1.	A o	child's problems must be considered in relation to the influence of the:
	a.	individual

- b. family
- c. community/culture
- d. all of the above

ANS: D REF: p.29-30 DIF: Easy COG: Factual

- 2. Victor is fearful of approaching new situations and often appears inhibited. Victor's mother reported that she struggles with similar difficulties. This is an example of:
  - a. emotional influences
  - b. biological influences
  - c. cognitive influences
  - d. behavioral influences

ANS: B REF: p. 29 DIF: ModerateCOG: Factual

- 3. Etiology refers to the \_\_\_\_\_\_ of childhood disorders.
  - a. causation
  - b. treatments
  - c. correlates
  - d. prevention

DIF: Easy ANS: A REF: p.31 COG: Factual

- 4. Which of the following is NOT an underlying assumption regarding abnormal child behavior?
  - a. Abnormal development is multiply determined.
  - b. The child and the environment are interdependent.
  - c. Abnormal development involves continuities and discontinuities.
  - d. All of these are underlying assumptions.

DIF: ModerateCOG: Factual ANS: D REF: p.31-33

- 5. Isabella is three years old and she frequently demands attention, overreacts, and refuses bedtime. These behaviors are considered:
  - a. common due to her age
  - b. diagnosable as clinical disorders
  - c. signs of an overly sensitive child
  - d. early warning signs of future difficulties

ANS: A REF: p.34 DIF: ModerateCOG: Applied

- 6. The dynamic interaction of child and environment is referred to as:
  - a. mutuality

c.	etiology transaction continuity		
	C REF: p.32	DIF: Easy	COG: Factual
ch a. b. c.	ne single theoretical or ildhood is the biological psychological family none of these		n explain various behaviors or disorders in
	D REF: p.34	DIF: ModerateC	OG: Factual
as a. b. c.	_		olishing developmental milestones is referred to
	A REF: p.35	DIF: Easy	COG: Factual
a. b. c. d.	ost often, adaptational a single cause poor relationships an ongoing interactio poor environmental of C REF: p.35	on between individ	ual development and environmental conditions  COG: Factual
a. b. c.	n organizational view of static unchanging dynamic fixed	of development im	plies a(n) process.
ANS:	C REF: p.35	DIF: Mod	derateCOG: Factual
ca a. b. c.	indows of time during lled: sensitive periods critical periods crucial periods necessary periods	which environmen	ntal influences on development are enhanced are
	A REF: p.35	DIF: Easy	COG: Factual
dis	ecause development is scussion of normal and disorganized	, se l abnormal behavio	nsitive periods play a meaningful role in any or.

c. d.	organized hierarchical organized and hierarch B REF: p.35		COG: Factual
e. f. g.	nildren's development of disorganized organized hierarchical organized and hierarc		manner.
ANS:	D REF: p.36	DIF: Easy	COG: Factual
the a. b. c.	ne developmental psyche importance of: developmental disrupted developmental procession developmental regression developmental obstaction.	otions sses and tasks ssions	th to studying childhood disorders emphasizes
	B REF: p.36		COG: Factual
it : a. b. c. d.	is necessary to consider one's genetic predisp how problematic behavior the child's familial him what is normative for D REF: p.36	r: osition aviors develop over story for maladjustn a given period of de	nent evelopment
tha a. b. c.	nildren's early caretakin at involve: planning and complet problem solving skill emotion, personality, fine motor skills	x processes	an important role in designing parts of the brain
ANS:	C REF: p.37	DIF: ModerateCO	G: Factual
a. b. c.	rain maturity occurs in disorganized organized hierarchical organized and hierarc		_ fashion.
	D REF: p.38		COG: Factual
a.		ns reach their destina	ral development is false? ation even before a baby is born. n early childhood.

- c. The connections in the brain are relatively pre-determined and the environment cannot change their course.
- d. Primitive areas of the brain develop first.

ANS: C REF: p.38 DIF: ModerateCOG: Factual

- 19. Which of the following statements about neural development is true?
  - a. Major restructuring of the brain in relation to puberty occurs between 6 and 9 years of age.
  - b. The brain stops changing after 3 years of age.
  - c. Primitive areas of the brain mature last.
  - d. Brain regions which govern basic sensorimotor skills undergo the most dramatic changes within the first 3 years of life.

ANS: D REF: p.38 DIF: ModerateCOG: Factual

- 20. Which of the following statements about genetics is false?
  - a. Genes determine behavior.
  - b. Genes are composed of DNA.
  - c. Genes produce proteins.
  - d. The expression of genes is influenced by the environment.

ANS: A REF: p.38-39 DIF: Moderate COG: Factual

- 21. The problem with family aggregation studies is that they:
  - a. are difficult to carry out
  - b. do not control for environmental variables
  - c. only tell us about the influence of the environment
  - d. only tell us about chromosomal abnormalities

ANS: B REF: p.40 DIF: Easy COG: Factual

- 22. Behavioral geneticists have concluded that:
  - a. many psychological disorders can be accounted for by an individual gene
  - b. much of our development and behaviors are influenced by a small number of genes
  - c. genetic contributions to psychological disorders come from many genes, which each make a small contribution
  - d. behavior is largely influenced by the environment

ANS: C REF: p.40-41 DIF: Easy COG: Factual

- 23. The part of the brain that regulates our emotional experiences, expressions, and impulses is the:
  - a. hypothalamus
  - b. hindbrain
  - c. basal ganglia
  - d. limbic system

ANS: D REF: p.41 DIF: Easy COG: Factual

- 24. Epinephrine is also known as:
  - a. dopamine

	serotonin cortisol		
d.	adrenaline		
ANS:	D REF: p.43	DIF: Easy	COG: Factual
a. b. c.	e part of the brain that hypothalamus hindbrain basal ganglia limbic system	is implicated in disord	ers affecting motor behavior is the:
	C REF: p.41-42	DIF: Easy	COG: Factual
abo a. b. c.	e gives us to be plated the future, to be plated cerebral cortex limbic system basil ganglia hippocampus		at make us human and allows us to think e.
ANS:	A REF: p.42	DIF: Easy	COG: Factual
ab. a. b. c. d.	ilities. temporal frontal parietal occipital		erlying much of our thinking and reasoning
ANS:	B REF: p.42	DIF: Easy	COG: Factual
a. b. c.	e gland p hypothalamus thyroid adrenal pituitary	produces epinephrine i	n response to stress.
	C REF: p.43	DIF: Easy	COG: Factual
a. b. c.	orchestrate the body's control the entire HPA	regulatory functions A axis	portant because they produce hormones that: sible threats in the environment
		DIF: Easy COG:	Factual
a.	e gland prain eating disorders. hypothalamus thyroid	olays a role in energy r	metabolism and growth, and is implicated in

	adrenal			
	pituitary	DIE, Fory	COC	Factural
ANS:	B REF: p.43	DIF: Easy	COG:	Factual
ho a. b. c.	ne gland rmones, including est pineal pituitary thyroid adrenal			functions by producing several
ANS:	B REF: p.43	DIF: Easy	COG:	Factual
co a. b. c.	nnected to a person's The HPA axis BZ-GABA Norepinephrine Dopamine			gical disorders, especially those regulate emotions.
	A REF: p.43	DIF: Moderate	eCOG: Factual	
an a. b. c. d.	is an inger, hostility, and agg Serotonin Benzodiazepine-GA Norepinephrine Dopamine B REF: p.44 (7)	ression. BA		educes overall arousal and levels of eCOG: Factual
ce a. b.	rtain types of behavio Serotonin Benzodiazepine-GA Norepinephrine	r.	e brain, turning	on various circuits associated with
ANS:	D REF: p.44 (7	Table 2.1)	DIF: Easy	COG: Factual
a. b. c.	Norepinephrine	-	atory problems	, such as eating and sleep disorders is:
ANS:	-	Γable 2.1)	DIF: Easy	COG: Factual
a.	notions serve what pu to serve as internal i to provide motivation	monitoring system	ns which appra	ise events as beneficial or dangerous

c. both a				
	of the above	DIE M 1	, COC F	2 4 1
ANS: C	KEF: p.45	DIF: Moderat	teCOG: F	actual
generally a. Seroto b. Benzo c. Dopar	involved in em onin odiazepine-GAl	otional and bel	•	ved in specific disorders but is more egulation is:
ANS: D	REF: p.44 (T	able 2.1)	DIF: M	oderateCOG: Factual
tasks. His a. angry b. negati c. fearfu	temperament value and intense ive affect or irrical or inhibited ve affect and ap	would be considitability	dered:	s easily frustrated when given challenging  Applied
20		C1. C	1	arge amounts of new information and
avoiding j a. Cogni b. Emoti c. The H d. Benzo ANS: B	potential harm. itions ions IPA axis odiazepine-GAI REF: p.45	BA DIF: Easy	_	COG: Factual ems in emotion
a. sensit				
b. reactive				
c. regula d. dereg				
ANS: C		DIF: Easy		COG: Factual
representa a. Social b. Obser c. Cogni d. Cogni	ations of thems l cognition vational learning itive mediation itive development	elves, relationsl	hips, and	nselves and others, resulting in mental their social world
42. Individua environm a. affect	ent.	emotion	ac	ecount for differing responses to a stressful

b.	sensitivity		
c.	reactivity		
d.	regulation		
ANS:	C REF: p.45	DIF: Easy	COG: Factual
43	problems refe	er to weak or al	osent control structures, whereas
pre	oblems mean that exist	ing control stru	actures operative in a maladaptive way.
	Regulation, dysregula		
	Dysregulation, regula		
	Reactivity, regulation		
	Regulation, reactivity		
	A REF: p.45	DIF: Moderat	teCOG: Factual
	emperament:		
			of behavior that appears very early in development
			nvironment and vice versa
	is considered one of t	he building blo	ocks of personality
	all of these		202 T
ANS:	D REF: p.46	DIF: Easy	COG: Factual
45.	desc	ribes the "slow	r-to-warm-up child", who is cautious in approaching
	vel or challenging situa		to warm of time to there in officeroning
	Positive affect and ap		
	Fearful or inhibited	F	
	Negative affect or irri	tability	
	Adaptive with negative		
	1		COG: Factual
46. Al	BA involves the examin	nation of:	
	behavior		
	antecedents		
	consequences		
	all of the above		
ANS:	D REF: p.48	DIF: Easy	COG: Factual
47.	explain the	acquisition of p	problem behavior on the basis of paired associations
be	tween previously neutr	al stimuli (e.g.	, homework), and unconditioned stimuli (e.g.,
pa	rental anger).		
a.	Operant models		
	Classical conditioning	_	
c.	Social learning mode	ls	
d.	Social cognition mod		
ANS:	B REF: p.48	DIF: Moderat	teCOG: Factual
48.	theorists er	nphasize attrib	utional biases, modeling, and cognitions in their
	planation of abnormal	-	
a.			

-	chodynamic		
d. Bio	tial learning		
		DIF: Easy	COG: Factual
ANS. C	KL1. p.40	DII'. Lasy	COG. I actual
49	models po	rtray the child's enviro	onment as a series of nested and interconnec
structur			
a. Env	ironmental		
b. Eco	ological		
c. Soc	ietal		
d. Mac	croparadigm		
		DIF: Easy	COG: Factual
50. Brofenl	brenner's (1977)	model does not include	le a consideration of:
	child in isolation	· · · · · · · · · · · · · · · · · · ·	
b. the	child's family m	nembers	
	society in which		
	•	a consideration of all o	of these
		DIF: Easy	
	1	J	
51. Attachr	nent theory cons	siders crying (in an infa	ant) to be a behavior that:
a. serv	ves to keep preda	ators away	
	nulates the immu		
	tates others	•	
d. enh	ances relationsh	ips with the caregiver	
		DIF: Easy	COG: Factual
	-	•	
52. Today's	s research and th	ninking accepts the not	ion that many childhood disorders:
a. can	not be overcome		
b. are	treatable with th	e use of medications	
c. rece	eive too much m	edia attention	
d. sha	re many clinical	features and causes	
ANS: D	-	DIF: ModerateCOC	G: Factual
	-		
53. The pro	ocess of attachme	ent typically begins be	tween of age.
a. 0-2	months		
b. 6-12	2 months		
c. 12-	18 months		
d. 18-2	24 months		
ANS: B	REF: p.51	DIF: Easy COC	6: Factual
d. 18-2 ANS: B	24 months REF: p.51	•	
			e affective interaction with the caregiver are
		attachment	pauciii.
a. sect			
	ious-avoidant		
	ious-resistant		
d disc	organized		

ANS:	B REF: p.52	(Table 2.2)	DIF: Easy	COG: Factual
the a. b. c.	fants that are wary of e caregiver are likely secure anxious-avoidant anxious-resistant disorganized			nd who often cannot be comforted by achment pattern.
	C REF: p.52	(Table 2.2)	DIF: Easy	COG: Factual
a. b. c.	ne attachment pattern secure anxious-avoidant anxious-resistant disorganized	n that has been lin	ked to conduct	problems and aggressive behavior is
ANS:	B REF: p.52	(Table2.2)	DIF: Moderat	teCOG: Factual
a. b. c. d.	secure anxious-avoidant anxious-resistant disorganized		·	and anxiety problems is:
ANS:	C REF: p.52	(Table 2.2)	DIF: Modera	teCOG: Factual
otl a. b. c.	hers and how the ch internal working n external working r internal attachmen external attachmen	ild relates to other nodel nodel t model	-	volving what the child expects from
	A REF: p.51		teCOG: Factua	1
a. b. c.	lationships with other		d's behavior ca	n only be understood in terms of
	C REF: p.51	DIF: Easy	COG: Factua	1
a. b.				s the importance of balancing the their environments.

d. psychopathological

ANS: A REF: p.53 DIF: Easy COG: Factual

# **Short Answer/Essay Questions:**

1. Discuss the three major underlying assumptions regarding abnormal child behavior.

- 2. Distinguish between continuous and discontinuous patterns of behavior development.
- 3. What is meant by using an integrative approach to understanding factors that influence a child's behavior?
- 4. Describe how sensitive periods can impact children's development. Can developmental change occur outside of these periods?
- 5. How can a baby with a difficult temperament influence and be influenced by the environment?
- 6. Discuss how children learn from their emotions and the emotional expression of others.
- 7. How permanent are early neuronal connections?
- 8. Discuss the major functions of four major neurotransmitters in the brain and their implicated role in psychopathology.
- 9. Discuss the importance of attachment and how it affects a child's internal working model of relationships.
- 10. Distinguish between emotion reactivity and emotion regulation.
- 11. Briefly describe the three primary dimensions of temperament.
- 12. Provide everyday examples of positive and negative reinforcement, extinction, and punishment.
- 13. Explain why an integrative approach is important in abnormal psychology.
- 14. Discuss the main principles of a developmental psychopathology perspective.
- 15. Why do family systems theorists stress the importance of looking at the whole family as opposed to one individual's difficulties?

# **Questions and Issues for Discussion:**

- 1. Should the distinction between abnormal and normal with regards to psychological functioning be considered absolute or on a continuum?
- 2. What are some examples of traits that appear to change continuously? What about traits that seem to change discontinuously? Which model better describes most of development?
- 3. Pick a television show or movie in which there are mental health concerns with regard to a child. Discuss the child's problems in the context of various paradigms and how each paradigm may contribute to an understanding of the cause of these problems.
- 4. The text outlines a variety of approaches to understanding psychological disorders. Which of these approaches seems to be the most valuable to explaining child psychopathology? Which is the least useful? Students are likely to have different opinions, which may spark some interesting discussion.
- 5. Have students research some of the historical perspectives of child psychopathology and present their findings to the class.

- 6. What is your opinion on Bronfenbrenner's ecological model? Is there anything missing from the model that you would include or anything you might remove? How might you improve on the way the model is depicted (as shown in your textbook).
- 7. Have students discuss their opinions on the nature/nurture debate concerning child psychopathology.
- 8. How do you think family and social influences change over the course of development? Do you think your parents or your peers were more influential on your own development during your child years? During your teen years?
- 9. Discuss how normal functioning can be informative of abnormal functioning and vice versa.
- 10. From a family systems perspective, consider what impact it would make on a child who has a different temperament then the rest of the family with whom the child lives with.

## **Website Suggestions:**

http://ornl.gov/sci/techresources/Human Genome/home.shtml The Human Genome Project website, with basic information about this 15-year project to understand more about our genetic composition. Easily understood by undergraduates, this website provides FAQs, terms, a search engine, and terrific links to related material.

<a href="http://www.med.harvard.edu/AANLIB/home.html">http://www.med.harvard.edu/AANLIB/home.html</a>The Whole Brain Atlas from Harvard University, with neuroimages of the normal and abnormal brain.

http://faculty.washington.edu/chudler/neurok.html Neuroscience for Kids, a fantastic site for those who are interested in learning about the brain and nervous system. This site is intended for kids, but would certainly be invaluable to those who are not biology or neuroscience majors!

# **Video Suggestions:**

*Children of Poverty* (1987). Films for the Humanities and Sciences. (26 minutes; \$149 purchase price)

Profiles America's children of poverty and shows the toll on children and mothers of problems finding food and shelter.

**Secret of the Wild Child** (production year unavailable). PBS Boston (WGBH Boston Video, NOVA). (60 minutes; \$19.95 purchase price)

Tells the story and rehabilitation of "Genie," a girl who was found at age thirteen and had been imprisoned in her bedroom her entire life.

*Society's Problems in Children's Lives* (1995). Films for the Humanities and Sciences. (29 minutes; \$89.95 purchase price)

Looks at how societal issues such as violence, drugs, and divorce are affecting children's lives and how they are coping.

American Adolescence (1999). Films for the Humanities and Sciences. (30 minutes; \$89.95 purchase price)

Investigates today's teens, the many challenges they face, and their hopes and dreams for the future of American society.

*The Brain* (1989). Films for the Humanities and Sciences. (23 minutes; \$89.95 purchase price) A look at the world of dreams, the nervous system, and nuclear magnetic resonance and electroencephalography.

*Classical and Operant Conditioning* (1996). Films for the Humanities and Sciences. (56 minutes, \$154.95 purchase price)

Explains the nature of behaviorism and its important applications in clinical therapy, education, and child-rearing.

Cognitive Development: Representation in Three to Five-Year-Old Children (1997). Films for the Humanities and Sciences. (30 minutes, \$154.95 purchase price)

Discusses a theory of mind that stems from a child's experiential-based understanding of causal relationships. Includes Piaget's theory.

**Damage: The Effects of a Troubled Childhood** (1997). Films for the Humanities and Sciences. (55 minutes, \$174.95 purchase price)

Part of the Series: Myths of Childhood: New Perspectives on Nature and Nurture. Investigates the question: Can the roots of adult phobias and anxieties be found in our childhoods?

**Do Parents Matter? Judith Harris on the Power of Peers** (1999). Films for the Humanities and Sciences. (12 minutes, \$69.95 purchase price)

Discusses the controversial theory of child development through adaptation of peer groups.

*The Development of the Human Brain* (1989). Films for the Humanities and Sciences. (40 minutes; \$149 purchase price, \$75 rental price)

An award-winning program that follows the physiological development of the human brain from conception to the age of eight.

*The Mind vs. the Brain* (1995). Films for the Humanities and Sciences. (27 minutes, \$89.95 purchase price)

Recent research into the brain has revealed that many mental disorders previously believed to be the product of environment and experience are actually rooted in biology and chemistry.

*Growing the Mind: How the Brain Develops* (2000). Films for the Humanities and Sciences. (50 minutes, \$174.95 purchase price)

Charts the changes in the human brain as it develops from infancy to adulthood. Addresses the brain's extraordinary adaptability and reorganization.