

Please Return To Mr. Adams

Lecture Notes Psychology Module 4: Prenatal and Childhood Development

Prenatal Development

- Prenatal defined as “before birth”
- Prenatal stage begins at conception and ends with the birth of the child.

Zygote

- A newly fertilized egg
- The first two weeks are a period of rapid cell division.
- Attaches to the mother’s uterine wall
- At the end of 14 days becomes an embryo

Embryo

- Developing human from about 14 days until the end of the eight week
- Most of the major organs are formed during this time.
- At the end of the eight week the fetal period begins.

Fetal Period

- The period between the beginning of the ninth week until birth

Prenatal Development – 45 Days– 2 months

Placenta

- A cushion of cells in the mother by which the fetus receives oxygen and nutrition
- Acts as a filter to screen out substances that could harm the fetus

Prenatal Development

- Play “Teratogens and Their Effects on the Developing Brain and Mind” (12:44) Segment #12 from The Mind: Psychology Teaching Modules (2nd edition)

Teratogens

- Substances that pass through the placenta’s screen and prevent the fetus from developing normally
- Includes: radiation, toxic chemicals, viruses, drugs, alcohol, nicotine, etc.

Prenatal Brain Development

- Play “The Effects of Hormones and the Environment on Brain Development” (6:50) Module #2 from The Brain: Teaching Modules (2nd edition)

Smoking and Birth Weight

Fetal Alcohol Syndrome (FAS)

- A series of physical and cognitive abnormalities in children due to their mother drinking large amounts of alcohol during pregnancy

Alcohol

- Play “Teratogens and Their Effects on the Developing Brain and Mind” (12:44) Segment #12 from The Mind: Psychology Teaching Modules (2nd edition)

The Beginnings of Life: The Newborn

Newborn and the Apgar Readings

- Insert “Testing Competency In a Newborn” Video #13 from Worth’s Digital Media Archive for Psychology
- Instructions for importing the video file can be found in the ‘Readme’ file on the CD-ROM

Rooting Reflex

- Infants’ tendency, when touched on the cheek, to move their face in the direction of the touch and open their mouth
- Is an automatic, unlearned response
- Child is looking for nourishment.

Reflexes in the Newborn

- Insert “Reflexes in the Newborn” Video #14 from Worth’s Digital Media Archive for Psychology
- Instructions for importing the video file can be found in the ‘Readme’ file on the CD-ROM

Newborn Reflexes

- Play “Capabilities of the Newborn” (3:59) Segment #13 from The Mind: Psychology Teaching Modules (2nd edition)

Temperament

- A person’s characteristic emotional reactivity and intensity
- A child might be:
 - An “easy” or “difficult” baby
- Temperament shown in infancy appears to carry through a person’s life.

Temperament

- Play “Bringing Up Monkeys” (9:40) Segment #23 from Scientific American Frontiers: Video Collection for Introductory Psychology (2nd edition)

Physical Development in Infancy and Childhood

Infant, Toddler, Child

- Infant: First year
- Toddler: From about 1 year to 3 years of age
- Child: Span between toddler and teen

Neural Developments

Maturation

- Biological growth processes that enable orderly changes in behavior

Motor Development

- Includes all physical skills and muscular coordination

Motor Development

- Play “Baby Body Sense” (11:00) Segment #24 from Scientific American Frontiers: Video Collection for Introductory Psychology (2nd edition)
Cognitive Development in Infancy and Childhood: Piaget’s Cognitive

Stages

Cognition

- All the mental activities associated with thinking, knowing, and remembering
- Children think differently than adults do

Child’s Thinking

- Play “The Magic Years” (10:00) Segment #25 from Scientific American Frontiers: Video Collection for Introductory Psychology (2nd edition)

Jean Piaget (pee-ah-ZHAY)

- Developmental psychologist who introduced a stage theory of cognitive development
- Proposed a theory consisting of four stages of cognitive development

Schemas

- Concepts or mental frameworks that people use to organize and interpret information
- Sometimes called schemes
- A person’s “picture of the world”

Assimilation

- Interpreting a new experience within the context of one’s existing schemas
- The new experience is similar to other previous experiences

Accommodation

- Interpreting a new experience by adapting or changing one's existing schemas
- The new experience is so novel the person's schemata must be changed to accommodate it

Sensorimotor Stage

- Piaget's first stage of cognitive development
- From birth to about age two
- Child gathers information about the world through senses and motor functions
- Child learns object permanence

Object Permanence

- The awareness that things continue to exist even when they cannot be sensed
- "Out of sight, out of mind"

Object Permanence

- Insert "Object Permanence" Video #15 from Worth's Digital Media Archive for Psychology
- Instructions for importing the video file can be found in the 'Readme' file on the CD-ROM

Preoperational Stage

- Piaget's second stage of cognitive development
- From about age 2 to age 6 or 7
- Children can understand language but not logic

Egocentrism

- The child's inability to take another person's point of view
- Includes a child's inability to understand that symbols can represent other objects

Childhood Thinking

- Play "A Change of Mind" (12:00) Segment #26 from Scientific American Frontiers: Video Collection for Introductory Psychology (2nd edition)

Concrete Operational Stage

- Piaget's third stage of cognitive development
- From about age 7 to 11
- Child learns to think logically and understands conservation

Conservation

- An understanding that certain properties remain constant despite changes in their form
- The properties can include mass, volume, and numbers.

Piaget's Conservation Task

- Insert "Piaget's Conservation Task" Video #18 from Worth's Digital Media Archive for Psychology
- Instructions for importing the video file can be found in the 'Readme' file on the CD-ROM

Types of Conservation Tasks

Formal Operational Stage

- Piaget's fourth and last stage of cognitive development
- Child can think logically and in the abstract
- About age 12 on up
- Can solve hypothetical problems (What if.... problems)

Cognitive Development

- Play "Infant Cognitive Development" (7:14) Segment #14 from The Mind: Psychology Teaching Modules (2nd edition)

Assessing Piaget's Theory

- Piaget underestimated the child's ability at various ages.
- Piaget's theory doesn't take into account culture and social differences.

Social Development

- Play "Social Development in Infancy" (6:44) Segment #15 from The Mind: Psychology Teaching Modules (2nd edition)

Stranger Anxiety

- The fear of strangers an infant displays around 8 months of age

Stranger Anxiety

- Insert "Stranger Anxiety" Video #16 from Worth's Digital Media Archive for Psychology

Attachment

- An emotional tie with another person resulting in seeking closeness
- Children develop strong attachments to their parents and caregivers.
- Body contact, familiarity, and responsiveness all contribute to attachment.

Harry Harlow

- Did research with infant monkeys on how body contact relates to attachment
- The monkeys had to choose between a cloth mother or a wire mother that provided food.
- The monkeys spent most of their time by the cloth mother.

Harlow's Studies

- Insert "Harlow's studies on Dependency in Monkeys" Videos #12a, 12b, and 12c. from Worth's Digital Media Archive for Psychology

Harlow's Study: Familiarity

- Sense of contentment with that which is already known
- Infants are familiar with their parents and caregivers.

Imprinting and Critical Period

- A process by which certain animals, early in life, form attachments
- The imprinted behavior develops within a critical period--an optimal period when the organism's exposure to certain stimuli produce the imprinted behavior.
- Konrad Lorenz studied imprinting.
- Studied imprinted behaviors
- Goslings are imprinted to follow the first large moving object they see.

Responsiveness

- Responsive parents are aware of what their children are doing.
- Unresponsive parents ignore their children--helping only when they want to.

Securely or Insecurely Attached

- Securely attached – children will explore their environment when primary caregiver is present
- Insecurely attached – children will appear distressed and cry when caregiver leaves. Will cling to them when they return

Attachment

- Play "Attachment" (5:03) Segment #21 from Psychology: The Human Experience

Attachment Harlow's Studies

- Insert "Harlow's studies on Dependency in Monkeys" Video #12c from Worth's Digital Media Archive for Psychology.

- Instructions for importing the video file can be found in the ‘Readme’ file on the CD-ROM.
- NOTE: This video clip could also be used earlier in this module.

Strange-Situation Test

- Insert “Morelli’s Strange-Situation Test” Video #17 from Worth’s Digital Media Archive for Psychology.
- Instructions for importing the video file can be found in the ‘Readme’ file on the CD-ROM.

Effects of Attachment

- Secure attachment predicts social competence.
- Deprivation of attachment is linked to negative outcome.
- A responsive environment helps most infants recover from attachment disruption.

Parental Patterns

- Baumrind’s three main parenting styles
 - Authoritarian parenting
 - Permissive parenting
 - Authoritative parenting

Authoritarian Parenting

- Low in warmth
- Discipline is strict and sometimes physical.
- Communication high from parent to child and low from child to parent
- Maturity expectations are high.

Permissive Parenting

- High in warmth but rarely discipline
- Communication is low from parent to child but high from child to parent.
- Expectations of maturity are low.

Authoritative Parenting

- High in warmth with moderate discipline
- High in communication and negotiating
- Parents set and explain rules.
- Maturity expectations are moderate.

Parenting Styles Parental Influences

- Play “Gender Development: Social Influences” (4:02) Module #3 from The Brain: Teaching Modules (2nd edition)

Three Key Developmental Issues
Module 4: Prenatal and Childhood Development

Continuity and Stages

- How much of behavior is continuous and how much follows a more stage like development?

Types of Growth Patterns

Stability and Change

- What developmental traits remain stable over time, and which change?

Nature and Nurture

- How much of our behavior is due to nature and how much is due to nurture?
- How do nature and nurture interact in development?

The End