

Week 6



Cognitive Development

Cognitive Development

- ❑ Developmental psychology
 - ❑ the study of progressive changes in human traits and abilities that occur throughout the life span
- ❑ Physical development
- ❑ Cognitive development

The Psychologist's Perception of Human Development

- ❑ Freud and the developing child
- ❑ Watson and childhood learning
 - ❑ “Little Albert”
- ❑ Piaget and the Thinking Child
 - ❑ stages of cognitive development

Cognitive Development in Infants

- ❑ Perceptual capabilities
 - ❑ visual ability
 - ❑ habituation
 - ❑ hearing ability
 - ❑ localization of sounds
 - ❑ differentiation of sounds
 - ❑ olfactory ability



Cognitive Development in Infants

Reflexes and motor skill

rooting reflex

sucking reflex

grasping reflex

Moro reflex

Babinski reflex



Cognitive Development in Infants

- ❑ Learning and memory

- ❑ Childhood amnesia
 - ❑ lack of conscious memories from infancy
 - ❑ episodic memories
 - ❑ implicit memories

Cognitive Development in Infancy and Childhood

- ❑ Piaget's theory of development
 - ❑ sensorimotor period - birth to 2 years
 - ❑ preoperational period - preschool years
 - ❑ concrete-operational period - elementary school years
 - ❑ formal-operational period - adolescence to adulthood

Cognitive Development in Infancy and Childhood

- ❑ Piaget's theory of development
 - ❑ Assimilation
 - ❑ the incorporation of new information into old ways of thinking or behaving
 - ❑ Accommodation
 - ❑ fundamental altering of old way of thinking
 - ❑ Equilibration

Infancy

- ❑ Piaget on infancy
 - ❑ Sensorimotor intelligence
 - ❑ Object permanence
 - ❑ “peek-a-boo”
 - ❑ prolonged crying when parent leaves

The Preschool Period

- ❑ Representational thought
 - ❑ the ability to represent objects mentally when they are no longer physically present
- ❑ Egocentrism
 - ❑ inability to understand that different people have different perspectives

Cognitive Development Through Middle Childhood

- ❑ Concrete Operations
 - ❑ a variety of mental transformations that can be carried out on concrete, tangible objects
- ❑ Conservation
 - ❑ the recognition that certain features of an object remain the same despite changes

Cognitive Development in Infancy and Childhood

- ❑ Information-processing view of development
 - ❑ explained not by qualitative differences in the way reality is viewed but by quantitative differences in the efficiency with which information is processed.

Language Acquisition

- ❑ Prespeech communication
- ❑ First words
 - ❑ overextension
 - ❑ underextension
- ❑ First sentences
 - ❑ telegraphic speech

Language Acquisition

- ❑ The acquisition of complex rules
 - ❑ grammar
 - ❑ errors of overregularization
- ❑ Speech in social context
 - ❑ pragmatics

Language Acquisition Explained

❑ Learning theories

- ❑ language acquisition is accomplished much like any kind of skill

❑ Nativist theories

- ❑ language acquisition is controlled by the genetically programmed development of certain neural circuits

Memory Development

- ❑ Changes in information-processing strategies
- ❑ changes in metacognition
 - ❑ the ability to to monitor one's own thoughts emerges

Cognitive Development in Adolescence and Adulthood

- ❑ Adolescent cognitive skills
 - ❑ formal operations stage
- ❑ Postformal operations
 - ❑ dialectic operations stage - ability to debate from two contradictory viewpoints

Cognitive Development in Adolescence and Adulthood

- ❑ Cognitive change during adulthood
 - ❑ Early adulthood - peak intellectual performance
 - ❑ Decline in cognitive ability
 - ❑ Biological and environmental factors in aging