

Cognitive Development

The First Three Years

Four Approaches to Cognitive Development

Intelligent behavior is deliberate and adaptive to circumstances.

The behaviorist approach studies the mechanisms of learning.

The Piagetian approach looks at changes in the quality of cognitive functioning.

The psychometric approach measures intelligence in quantitative terms.

The information processing approach focuses on differences in how people use their intelligence.

Behaviorists study two simple learning processes:

Classical conditioning

Operant conditioning

Information processing

Focuses on memory, problem-solving, and learning

Manipulation of perceptions and symbols

Habituation

The psychometric approach uses intelligence tests that measure comprehension and reasoning.

The tests provide an intelligence quotient (IQ) score

Tests should have high validity and reliability

Piaget's four stages of cognitive development

Sensorimotor lasts from birth to two years

Object permanence

Preoperational lasts from 2 to 6 years

Deferred imitation

Concrete operations lasts from 7 to 12 years

Formal operations lasts from 13 years to adult

Newer Approaches to Cognitive Development

Cognitive Neuroscience: The Brain's Cognitive Structures

Social Contextual: Learning from Interactions with Caregivers

Language Development

Language is a communication system based on words and grammar.

Prelinguistic speech includes crying, cooing and babbling.

Linguistic speech begins between 10 and 14 months.

Holophrases express a complete thought in one word.

Telegraphic speech includes only essential words.

First words are usually nouns, verbs, and adjectives.

Early speech overregularizes rules

Child-directed speech (motherese) helps development

Two theories of language acquisition:

Nativism (Chomsky) Learning language comes naturally because of the brain's innate capacity.

Reinforcement (Skinner) Language is learned based on experience.