

Cognitive Development

Definition

- Mental activity
- Cognition
- Behaviour through which knowledge of the world is attained and processed

Main Idea: children think differently to adults

Baby start from what they can sense and become more abstract

Stage1 [Sensorimotor stage (0-2)]  
Explore the world through their senses and actions

**Object Permanence (2.5-3.5 Months)**  
*Understanding that objects and events continue to exist even when they cannot be observed*

**Learn things by developing a Schema, specific psychological structure of organized ways of making sense of experience.**

**Goal-oriented behaviour**

Equilibrium

Assimilation  
[Applying Schema]

Accommodation  
[Changing Schema]

Piaget's Theory

Stage2 [Preoperational stage (2-7)]  
Able to use language & other symbols to represent the world.

Common Characteristics

- Increase in representational or symbolic activity
- Operation refers to any mental actions that obey logical rules
- Difficult to differentiate dream or reality
- Unable to think abstract concepts

Egocentrism

Animistic thinking

Attributing life into an inanimate object

Decline between age 4-8

Limitations

**Centration:**  
*Centration is to focus on one aspect of situation, neglecting otherimportant features*

**Inability to conserve:**  
*Conservation is the understanding that certain physical characteristics remain the same even when their outer appearance changes*

**Inability to irreversibility:**  
*Irreversibility is the inability to mentally go through a series of steps in a problem and then reverse direction,returning to the start point(undo)*

**Lack of hierarchical classification:**  
A 3-year-old can complete the number-conservation task if there are only 3 items, and older children can complete more and more different tasks.  
  
2-year-olds can understand global categories (animals, plants);  
  
3-year-olds can understand super-ordinate categories (furniture), basic level (chairs, tables), and subcategories (desk chair, rocking chair).

Stage3 [Concrete operational stage (7-12)]  
Able to think logically

Stage4 [Formal operational (12+) ]  
Able to reason with abstract symbols only