

## **fifth lecture.**

### **Cognitive theory**

Jean piaget(1896-1980) is considred the father of this theory.

#### **Definition .**

Cognitive theory explains haw a child construts a mental model of the world,and regarded cognitive developement as a process that occurs due to biological maturation and interaction with the environment.

Piaget is famous for his four stages of cognitive developement, child hasto understand a concept before they can acquire the practical language witch express that concept.

#### **Stages of cognitive developement.**

##### **Sensory-motor (birth to2years)**

infant and toddlers are learning about the world throught motor and sensory experiences. intially ,language is limited to infants because they must first experience the world and developmental shemas as a way to represent these experience. D uring this earliest stage,children and toddlers acquire knowledge through sensory experiences and manipulating objects (senses and motor responses).

##### **preoperational stage of cognitive development.**

##### **(2to7years)**

Children begin to think symbolically and learn to use words and pictures to represent objects.

-they tend to be egocentric and struggle to see things from the percpective of others.

- Getting better with language and thinking,but still tend to think is very concenterate think.

At this stage, kids learn throught pretended play but still struggle with logic and taking the point of view of ather people.

## **concrete operational stage .**

children becomes much more adept at using logic ,the egocentrism begin to disappear.they start to think logically about concrete events.they also to begin understand the concept of conservation,they tend to struggle with abstract and hypothetical concepts.

## **Formal operational stage .**

**(12-18 )**

Adolescent and young adults become capable of seeing multiple potential solution to problems and think more scientifically about the world around them. They begin to think abstractly and reason about hypothetical problems.start to think about moral,philosophical,ethical, social,and political issues that require critical and abstract reasoning and plan for the future and reason.

## **Most important concepts of cognitive theory.**

### **Schemas.**

Describes both the mental and physical action involved understanding and knowing.they help to interpret and understand the world.

### **Assimilation.**

The process of taking in new information into our already existing.

### **Accommodation.**

Another part of adaptation is the ability to change existing Schemas.

### **Equilibration.**

It is important to maintain a balance between applying previous knowledge (assimilation) and changing behaviour to account for new knowledge(accommodation).

## **The application of cognitive theory.**

-Education –training and development –problem solving and decision making in also cognitive therapy-artificial intelligence and machine learning.

### **Criticism.**

This theory is not directly observable, neglected cultural and social factors, the methodology is not clear

It overestimated the ability of adolescents and underestimated the capacity of infants, it also neglected individual choice and undervalues emotions.

Ignores the sequential continuity of morals, laws, and social norms.