

How Does Our Thinking Change With Age?



Module 10 Cognitive Development



MODULE OBJECTIVES:



- How does our thinking change as we develop?
- What are Piaget's 4 stages Cognitive Development?

It was once accepted that because babies cannot speak, then they must not think.



Jean Piaget examined the development of thought in children.



How does thought develop?



☞ Piaget's theory focuses on _____

☞ Piaget believed that children play an active role in their cognitive development.

- Piaget's theories emphasized biology, which allow them to be applied to any culture

Piagetian Stage Approach



☞ Piaget claimed that all children pass through a series of four universal stages:

- Sensorimotor (birth to 2 years)
- Preoperational (2 to 7 years)
- Concrete operational (7 to 12 years)
- Formal operational (12 years and beyond)

Piaget believed that infants spend a LOT of time trying to make sense of the world.



☞ _____
- a way of organizing and categorizing thoughts and experiences.

☞ Schemas allow children to make comparable generalizations.



Piaget believed that children develop and modify schema by two processes:



Example



Wait...I have a new idea!



☞ _____

☞ Example- The baby with a schema of dogs is surprised the first time she sees a cat- it resembles a dog, but meows instead of barks and rubs up against her rather than licking

☞ The baby must _____ her previous theory to include this new kind of animal.

John has a dog...his schema for dog is an animal with four legs and a tail. John's theory of dogs also includes the concept that dogs are friendly and like to lick people's faces. One day John is bitten by a neighbor's dog.



Piaget's Stages of Cognitive Development (Part I)

SENSORIMOTOR STAGE

(Age 0-2)
The child begins to interact with the environment.



This form of thought begins with the infant experiencing the world through their



Sensorimotor Stage (birth-2yrs)



☞

- Infants construct an understanding of the world by coordinating sensory experiences with motor actions

Infants begin to interact with



Realizing that a rattle makes noise-they shake their arms and laugh whenever someone puts a rattle in their hand



Why is peek-a-boo fun for babies?



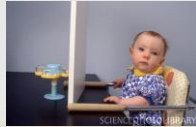
This is a cognitive milestone that develops in the Sensorimotor stage called _____

Out of Sight, Out of Mind...



Object Permanence allows infants to now recognize

- This usually develops around 8 months



Piaget's Stages of Cognitive Development (Part II)

PREOPERATIONAL STAGE

(Age 2-6 or 7)
The child begins to represent the world symbolically.



Preoperational Period (2-7 years)

The period in which children become able to

- Words, gestures, pictures



What games did you play at this age?

☞ Children play with objects in new ways and try to



Me, Me, Me....

☞ A key element in this stage is egocentrism

- _____

☞ Children in this stage:

- Cannot see your point of view
- _____



Preoperational thinking is animistic: _____

☞ They believe that objects such as the sun, trees, and clouds have motives, feelings, and intentions

- "dark clouds are angry"
- "soap sinks because it is tired"

Piaget's Stages of Cognitive Development
(Part III)

CONCRETE
OPERATIONAL STAGE

(Age 7-11 or 12)
The child learns rules
such as conservation.



Concrete Operational



☞ This thinking involves using *operations* and replacing intuitive reasoning with logical reasoning in concrete situations

- Not hypothetical contexts.

☞ A milestone of this stage is Conservation



Piaget's Stages of Cognitive Development
(Part IV)

FORMAL
OPERATIONAL STAGE

(Age 12-adulthood)
The adolescent can
transcend concrete
situations and think
about the future.





Formal Operational Stage 12+

- ❖ Formal operational thought is more abstract and logical.
 - The individual can think hypothetically, consider future possibilities, and use complex thought and deductive logic.
- ❖ Children understand that reality is not the only possibility

The return of egocentrism!



- ☞ Adolescents can display very logical thought, but are not known for this use.
- ☞ Analyzing private thoughts and feelings reflect the

- You just don't understand ME!

Back to the survey....



- ❖ Concrete Operational Child (9-year-old)
 - All of these children placed their third eye on the forehead between their two natural eyes
- ❖ Formal Operational Child (12-year-old)
 - These children gave a wide variety of answers with imaginative rationales
 - Some answered palm of the hand or inside the mouth and explained why.
