Thinking

By

Dr: Ibtihal M.A. Ibrahim
Lecturer Psychiatry- Mansoura University
Thinking

Definition:

• It is a complex mental activity consisting of development and manipulation of symbolic presentation.

• It does not depend upon sensory or motor contact with the present environment.

• Symbolic representations form the essential tools of thinking.

Tools of Thinking:

1. Language Symbols: Vocal or written expressions used for communication between human beings.

2. Diagrams, Maps, and Musical scores: Useful symbols which represents complex situations with multiple relationships among the items.

3. Concepts: It is a relationship or rule which classifies together those characteristics possessed by the objects or the subjects. This is carried out by noting the similarities or dissimilarities among various items.

4. Combination of concepts, principles, Rules, Laws and Systems.

Concept Formation:

1. Generalization: Discovering common features in dissimilar objects.

2. Differentiation: Discovering different characteristics in similar objects.

3. Abstraction: High order generalization.

Classification of Thinking:

1. Classification according to Function.

2. Classification according to Emotional factors.

3. Classification according to Relation to reality.
4. Classification according to Consciousness.
5. Classification according to Form.

1. Classification according to Function:
   a) Imaginative thinking:
      I. **Free imagination**: in which the individual does not direct or control his thinking but there is spontaneous free association of ideas leading to one another. This occurs in:
         i. *Imaginative play of children*
         ii. *Day dreams of Adults*
         iii. *Night dreams*
         iv. *Autistic thinking*
      
      II. **Controlled imagination**: thinking here functions in a controlled way to reach certain goals. This type of imagination is mainly found in:
         i. *Artistic production*: such as novel writing, painting, drawing, poem and musical production.
         ii. *Invention*: it is creative and original productions depending mainly on controlled imagination. It passes usually through the following steps:
             1. Preparation phase.
             2. Incubation phase.
             3. Inspiration phase.
             4. Verification phase.

   b) Purposive thinking:
      I. **Problem solving**
      II. **Logical or rational thinking**: it is based on reasoning.

2. Classification according to Emotional Factors:
a) **Egocentric or biased thinking:** Thinking is influenced by the person attitudes, emotions, biases and hidden unconscious complexes.
b) **Objective thinking:** Person thinks about his problems with a critical attitude without the interference with his personal factors in judgment.

3. **Classification according to its relation to reality:**
   a) **Realistic:** Person thinks in real problems and reaches realistic conclusions using facts and principles that are accepted by the society.
b) **Idealistic:** Person thinks in what should be rather than in what is actually present. It depends on using higher ethical and moral standard with philosophical orientation.

4. **Classification according to consciousness:**
   a) **Conscious:** Person is aware of what he is thinking about and can change direction of his thoughts.
b) **Unconscious:** Thought processes carried beyond one’s awareness e.g. forgotten name of an old friend may come suddenly, solution of a problem after restful night sleep, post hypnotic suggestions and slips of tongue and pencil.

5. **Classification according to Form:**
   a) **Abstract:** Depends on finding the significant relation or difference between objects or concepts after understanding their meaning. It is tested by asking patient to explain proverbs
   b) **Concrete:** Person cannot reach proper conclusions through lack of understanding of meanings leading to false concept formation.

**Physiology of Thinking:**

- Thinking is an integrative process including perception, speech, memory, learning, emotion, motives, intelligence, motor and visceral reactions.
- It is the outcome of function of all the perceptual areas of the brain through their connection with the association area in the presence of an intact ascending reticular formation.
• Speech is an integral part of thinking.

**Disorders of Thinking:**

1. **Stream:**
   a) Acceleration
   b) retardation
   c) Circumstantiality
   d) Thought block
   e) Disconnection or incoherence

2. **Content:**
   a) Preoccupation
   b) delusions

3. **Form:**
   a) Negative formal thought disorder
   b) Positive formal thought disorder

4. **Control or possession:**
   a) Obsessive ideation and ruminations.
   b) Thought Alienation
      I. Thought broadcasting
      II. Thought insertion
      III. Thought withdrawal