

Theories of learning

1. Trial and error theory of learning.

The famous psychologist Edward L. Thorndike was the initiator of the theory of trial and error learning.

- In one of his experiments, he put a hungry cat in a puzzle box.
- There was only one door which could be opened by correctly manipulating a latch.
- A fish was placed outside the box.

- The smell of the fish acted as a strong motive for the hungry cat to come out of the box.
- Cat tries to squeeze through every opening.
- It made a number of random movements and in one of the random movements, the latch was manipulated accidentally.
- The cat came out and got its reward.
- In another trial, the process was repeated.
- The cat was kept hungry and placed in the same puzzle box.

- The fish and its smell again worked as a motive for it to get out of the box.
- It again made random movements and efforts. But this time, it took less time to come out.
- In subsequent trial such incorrect responses, biting and dashing were gradually reduced and the cat took less time on each succeeding trial.
- In due course, it was in a position to manipulate the latch as soon as it was put in the box.

- In this way, gradually, the cat learned the art of opening the door.

2. Theory of conditioning-

While studying the functioning of the digestive system, A russian psychologist named Ivan Pavlov faced an problem, The dogs in his experiment salivated not only upon actually eating but also when they saw the food.

- Pavlov begin to study this phenomenon, which he called 'Conditioning'

- In one of his experiments, Pavlov kept a dog hungry for a few days and then tied him to the experimental table which was fitted with certain mechanically controlled devices.
- The dog was made comfortable.
- The observer himself remained hidden from the dog but was able to view the experiment by means of a set of mirrors.
- arrangement was made to give food to the dog through an automatic mechanism.
- He also arranged for a bell to ring every time and food was presented to the dog.

- When the food was put before the dog and the bell was rung, there was automatic secretion of saliva from the mouth of the dog.
- The activity of presenting the food accompanied with the ringing of the bell was repeated several times and the amount of saliva secreted was measured.
- After several trials the dog was given no food but the bell was rung.
- In this case also, the amount of saliva secreted was measured.

- It was found that even the absence of food (The natural stimulus), the ringing of the bell (An artificial stimulus) caused the dog to secrete the saliva.

3. Theory of insightful learning/ insight.

1. In one experiment, Kohler put the chimpanzee, sultan, inside a cage and a banana was hung from the roof of the cage. A box was placed inside the cage.
 - The chimpanzee tried to reach the banana by jumping but could not succeed.

- suddenly, he got an idea and used the box as a jumping platform by placing it just below the hanging banana.

2. In another experiment, Kohler made this problem more difficult and two or three boxes were required to reach the banana.

- Moreover, the placing of one box on the other required different specific arrangements.

3. In more complicated experiment, a banana was placed outside the cage of the chimpanzee.

- Two sticks, one longer than the other, were placed inside the cage.
- one was hollow at one end so that the other stick could be thrust into it to form a longer stick.
- The banana was so kept that it could not be picked up by any one of the sticks.
- The chimpanzee first tried to reach out the banana with these sticks one after the other but failed.
- Suddenly, the animal had an idea and joined the two sticks together and reach the banana.

THANK

YOU!