Theories of Learning

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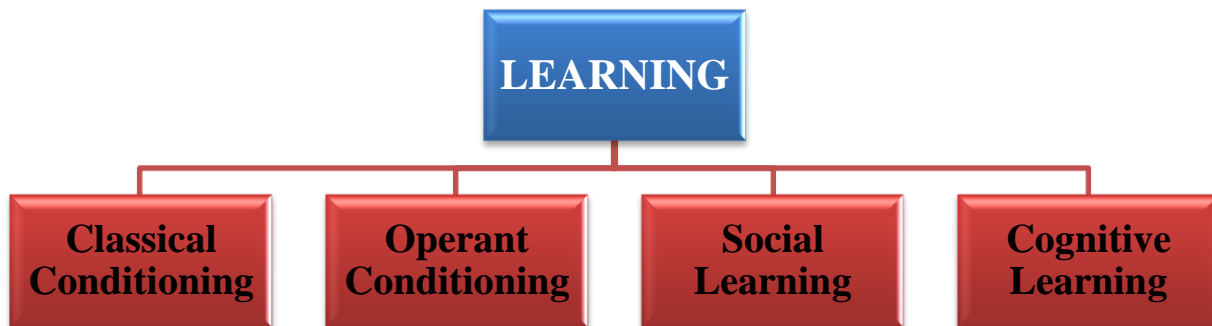## 1. Classical Conditioning

Classical conditioning is the association of one event with another desired event resulting in a behavior. The most well known experiments on classical conditioning were conducted by **Ivan Pavlov**, the Russian psychologist, who won the Nobel Prize for his experiments on this subject. Pavlov conducted an experiment on dogs and tried to establish a Stimulus-Response (S-R) connection. He tried to relate the dog's salivation and the ringing of the bell. In his experiments, he put some meat in front of dogs.

Pavlov Experiment with dog

Pavlov established this theory through findings of the experiment with dog. Pavlov presented piece of meat to dog. He noticed salivation in dog and the salivation is increased noticeably. He later, rang the bell without meat but the dog did not salivate. This means ringing bell did not stimulate for salivation. He then, linked ringing bell and serving meat of piece repeatedly. Dog repeatedly heard the bell just getting meat. Dog learnt that when the bell rings he will get meat. Thus, whenever dog hears ringing bell, starts salivating. Later, Pavlov stopped providing meat, but dog salivation on ringing bell. Pavlov described this phenomenon i.e. dog responded with ringing bell. The dog had learned an association between ringing bell and the food. In conclusion, this learning is conditional response involves association between conditioned stimulus (bell), unconditioned stimulus (food), and unconditioned response (salivation).

In an organizational setting we can see classical conditioning operating. For example, at one manufacturing plant, every time the top executive from the head office would make a visit, the plant management would clean up the administrative offices and wash the windows. This went on for years.

Eventually, employees would turn on their best behavior and look prim and proper whenever the windows were cleaned even on those occasions when the cleaning was not paired with the visit

from the top brass. People had learnt to associate the cleaning of the windows with the visit from the head office.

2. Operant Conditioning

Operant is defined as behavior that produces effect. Operant conditioning is based on the work of **B.F. Skinner** who advocated that individuals produce responses that are rewarded and will not produce responses that are either not rewarded or are punished. Operant conditioning argues that behavior is a function of its consequences. Behavior is likely to be repeated if the consequences are favourable. Behavior is not likely to be repeated if the consequences are unfavorable. Thus the relationship between behavior and consequences is the essence of the operant conditioning.

Based upon this direct relationship between the consequences and the behavior, the management can study and identify this relationship and try to modify and control behavior. Hence, certain types of consequences can be used to increase the occurrence of a desired behavior and other types of consequences can be used to decrease the occurrence of undesired behavior.

One can see examples of operant conditioning in the organizations. For instance, working hard and getting the promotion will probably cause the person to keep working hard in the future. On the other hand, if a boss assures his subordinate that he would be suitably compensated in the next performance appraisal, provided the employee works over time.

However, when the evaluation time comes, the boss does not fulfill his assurance to his subordinate, even though the latter had worked overtime. Next time, the subordinate coolly declines to work overtime when the boss requests him to do so. Thus, it can be concluded that the behavior consequences that are rewarding increase the rate of response, while the aversive consequences decrease the rate of response. Operant conditioning techniques are extensively used in clinical and educational research, control of alcoholism and control of deviant children in a class room.

3. Social Learning

Social learning theory was proposed by Albert Bandura in 1977. Bandura states that Individuals can also learn by observing what happens to other people and just by being told about something, as well as by direct experiences. Much of what we have learned comes from observing and imitating models-parents, teachers, peers, superiors, film stars etc. This view that we can learn through both observation and direct experience has called social learning theory.

This theory assumes that behavior is learned from the environment through the process of observational learning. Social learning theory emphasizes the interactive nature of cognitive,

behavioral and environmental determinants. The influence of model is central to the social learning view point.

For instance; newly appointed employees observe the ways of supervisors and managers and imitate their behavior in organization. Likewise, children can easily copy the dancing steps observing their people dancing or watching television. This model is more applicable in teaching-learning process in school and colleges, training and development in organization, etc. According to this model, the individual learning process consists of following steps:

a) Attention Process:

People learn from a model only when they recognize and pay attention to its critical features. We tend to be most influenced by models that are attractive, repeatedly available, important to us or similar to use in our estimation.

b) Retention Processes:

A model's influence will depend upon how well the individual remembers the model's action after the model is not longer readily available.

c) Motor Reproduction Processes:

After a person has seen a new behavior by observing the model, the watching must be converted to doing. This process then demonstrates that the individual can perform the modelled activities.

d) Reinforcement Processes:

Individuals will be motivated to exhibit the modeled behavior if positive incentives or rewards are provided. Behaviors that are positively reinforced will be given more attention, learned better and performed more often.

4. Cognitive Learning

Cognitive mapping theory was established by **Edward Tolman** (1886-1959), an American psychologist. This theory is primarily based on how events and objects are related to each other. This theory relates two stimuli that describe stimulus-stimulus. Irrespective to classical conditioning and operant conditioning theories, cognitive theory considers the learning as the outcome of deliberate thinking about the problem.

Cognition is the process of acquiring knowledge. Cognitive is the individual's thought, knowledge, level of understanding and interpretation of any event, object or person. This theory

states that learning involves a relationship between cognitive cues (hints about how to choose the right way) and expectations. Learning is the outcome of thinking and knowing.

Experiment of cognitive theory

Tolman conducted an experiment with white rat. He first trained rats to run in maze (web) without providing rewards (food). After trained them, he served food as rewards. One day after providing food, the rats are found running faster in this maze. This showed that rats learnt there will be food at the end of race and they used this knowledge in different ways in the following ways. This proves that animals have ability to learn things which they can use later in different ways. This connects cognitive maps in rats.

Tolman explained this phenomenon as individual act on beliefs, as individual act on beliefs, attitudes, changing conditions. They use their knowledge to struggle for their goals. He believed that individual not only respond to stimuli but does more than responding.

Following conclusions are made from this experiment:

- Rats could learn to run through a complicated maze, with purpose and direction, towards attaining a goal.

- Rats learn to expect that certain cognitive cues are associated with choice points. These cues can eventually lead to rewards.

- Rats, if receive the rewards, the bonding between cue and expectancy can be strengthened and learning takes place.

- Latent learning occurs even when no reinforcement is offered.