



Question 1. What is learning? What are its distinguishing features?

Answer: The process of learning has certain features:

1. Learning always involves some kinds of experience or practice.
 - Changes due to maturation or growth are not learning.
e.g.: One learns that if the bell rings in the hostel after sunset, then dinner is ready to be served.
2. Sometimes a single experience can lead to learning.
e.g.: A child strikes a match stick on the side of a matchbox and gets her/his finger burnt. Such an experience, makes the child learn to be careful in handling the matchbox in future.
 - Before it can be called learning, the change must be relatively permanent, it must last for a fairly long time.
3. Learning must be distinguished from the behavioural changes that are neither permanent nor learnt.
eg. changes in behaviour due to fatigue, habituation and drugs.
4. Learning is a change in behaviour, for better or worse.
5. Learning follows a sequence.

Question 2. How does classical conditioning demonstrate learning by association?

Answer:

- Classical conditioning is a type of learning in which an organism learns to associate stimulus.
 - Conditioning is the simplest form of learning.
 - Classical conditioning was first explained in Pavlov's experiments in which a dog was kept on a harness with a tube attached to the dog's jaw on one end, a measuring jar on the other end.
 - The dog was kept hungry in the course of experiments, every time the dog was given food a bell was rung before it, slowly the dog became conditioned to believe that the ringing bell meant that food was coming.
 - So, he began salivating at the sound of the bell.
 - The dog continued to salivate even when food was not given after the bell.
 - Hence, salivation became a conditioned response to the conditioned stimulus. Various forms of classical conditioning are:
1. Unconditioned stimulus (US): This stimulus consistently evoked a response or is reliably followed by one or it has potential capacity to evoke a natural response. e.g. food.
 2. Conditioned stimulus (CS): It is also known as a neutral stimulus because except for an altering or intentional response, the first few times it is presented, it does not evoke a specific response.
Any stimuli which lacks natural capacity to evoke natural response but develops this capacity with consistent pairing with US. For example bell.
 3. Unconditioned Response (UR): The response that reliably follows the unconditioned stimulus is known as the

unconditioned response, e.g. Saliva due to food. (iv)
Conditioned Response (CR): When presentation of the originally neutral conditioned stimulus evokes a response. This response is what is learned in classical conditioning, e.g. Saliva is a response to the bell.

Determinants of classical conditioning:

1. Time Relations between stimuli: In classical conditioning the first three are called Forward Conditioning Procedures and the fourth one is called Backward Conditioning. The basic experimental arrangements of these procedures are as follows:
 - Simultaneous Conditioning: When the CS and US are presented together. It is effective to acquire CR but requires greater number of trials.
 - Delayed Conditioning: The onset of CS precedes the onset of US. The CS ends before the end of the US. It is most effective way of acquiring CR.
 - Trace Conditioning: The onset and the end of the CS precedes the onset of US with some time gap between the two. It is effective but requires greater number of trials.
 - Backward conditioning: The US precedes the onset of CS. It is least effective way to acquire CR.
2. Type of unconditioned stimuli: The unconditioned stimuli used in studies of classical conditioning are of two types: Appetitive e.g. eating drinking etc. according to researches it is slower and requires greater number of trials
 - Aversive e.g. Noise, bitter taste etc. classical conditioning is established in one, two or three trials so it is more effective.
3. Intensity of conditioned stimuli: This influences the course of both appetitive and aversive classical conditioning. More intense conditioned stimuli are more effective in accelerating the acquisition of conditioned responses, e.g.: The more intense the conditioned stimulus, the fewer are the number of acquisition trials needed for conditioning, i.e. intense irritating noise is more effective.

Question 3. Define operant conditioning. Discuss the factors that influence the course of operant conditioning.

Answer: Operant or instrumental conditioning is a form of learning in which behaviour is

learned, maintained or changed through its consequences.

Determinants of operant conditioning :

1. Reinforcers

- A reinforcer is defined as any stimulus or event which increases the probability of the occurrence of a desired response.
- The type - positive or negative, frequency, quality and schedule or reinforcer are determinants of operant conditioning.

1. Type of reinforcement:

- Positive reinforcement involves stimuli that have pleasant consequences. They strengthen and maintain the responses that have caused them to occur.
- Negative reinforcement involve unpleasant and painful stimuli. Responses that lead organisms to get rid of painful stimuli or avoid and escape from them provide negative reinforcement. Negative reinforcement leads to learning of avoidance and escape responses.

2. Frequency/number of reinforcement and other feature :
 - Frequency of trial on which an organism has been reinforced or rewarded.
 - Amount of reinforcement i.e. how much of reinforcing stimulus (food or water) one receives on each trial.
 - Quality of reinforcement i.e. to the kind of reinforcer. Bread of inferior quality as compared with pieces of cake have different reinforcing value.
3. Schedule of reinforcement:
 - This refers to the arrangement of the delivery of reinforcement during trials.
 - When a desired response is reinforcement every time it occurs we call it continuous reinforcement.
 - When according to schedule responses are sometimes reinforced, sometimes not it is known as partial reinforcement and has been found to produce greater resistance to extinction.
4. Delayed reinforcement:
 - It is found that delay in the delivery of reinforcement leads to poorer level of performance.

Question 4. A good role model is very important for a growing up child. Discuss the kind of learning that supports it.

Answer: Observational learning: The acquisition of new forms of behaviour, information or concepts through exposure to others and the consequences they experience is called observational learning. This learning is also called social learning because we human beings learn many simple and complex social skills through observations. The concept of social learning was introduced by BANDURA.

Characteristics of observational learning

- Individuals learn social behaviour of person of status, respect and behave similarly when put in specific social situation e.g. In games, children quite often use.
- For such learning only those persons are observed who are considered to be as role models.
- Social behaviours are learned by observation.
- Personality characteristics, habits are developed through observational learning.

Concept of modeling

- According to social learning much of what human beings learn through direct experience can be learned through watching someone. It is because of modeling.
- Observational learning observers acquire knowledge by observing the model's behaviour, but performance is influenced by model's behaviour being rewarded or punished.
- Children of fearful parents become fearful, children of critical parents become critical and children who observe confident adults tend to become confident themselves.

Influence of modeling

- It can be well understood by studies conducted by BANDURA.
- He showed a 5 minute film to children. The film showed numerous dolls including bobo dolls in a play room. The film had three versions:
 - 1st group of children see a boy being punished for his aggressive behaviour while playing.
 - 2nd group of children see boy being rewarded and praised by adult for being aggressive to the doll.
 - 3rd group of children see nothing, neither the boy being rewarded nor punished for aggressive behaviour displayed.

- It was found that those children who displayed aggressive behaviour being rewarded were most Aggressive, those who had seen aggressive model being punished were least aggressive.

Conclusion

In observational learning, observers require knowledge by observing model's behaviour but performance is influenced by model's behaviour being rewarded or punished.

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