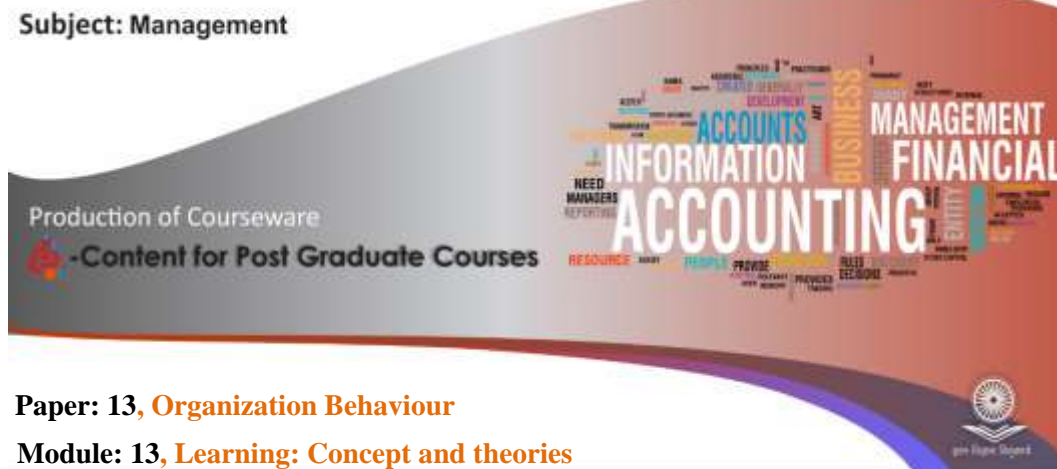




**Subject: Management**



**Paper: 13, Organization Behaviour**

**Module: 13, Learning: Concept and theories**



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Items	Description of Module
<b>Subject Name</b>	Management
<b>Paper Name</b>	Organization Behaviour
<b>Module Title</b>	Learning: Concept and theories
<b>Module Id</b>	Module no.-13
<b>Pre-Requisites</b>	Basic knowledge of Individual Behaviour
<b>Objectives</b>	To study the basic concepts of learning and its theories
<b>Keywords</b>	Learning, Reinforcement, Classical conditioning, operant conditioning, social learning, cognitive learning, schedules of reinforcement.

### QUADRANT-I

Module 13 Learning: Concept and theories
1. Learning Outcome
2. Introduction
3. Meaning and Definitions of Learning
4. Theories of learning
5. Principles of learning
6. Learning and OB
7. Summary

#### 1. Learning Outcome:

After completing this module the students will be able to:

- Understand the concept and nature of learning.
- Comprehend various theories of learning.

- Illustrate various principles of learning.

## 2. Introduction

Learning is one of the important psychological processes that determine the human behaviour. All human behaviours either directly or indirectly are affected by learning process. Learning can be conceptualised as acquiring new behaviour in an interactional environment. It is the process of acquiring, assimilating and internalizing cognitive, motor or behavioural inputs for their varied uses as and when required.

## 3. Definitions of Learning

With every new experience and every new event or situation, we learn something new. But, this concept of learning is purely theoretical. In real terms, learning can be described as the modification of one's behaviour through practice, training and experience. A few definitions of learning are given below to understand the nature of learning.

“Learning is a relatively permanent change in behaviour that occurs as a result of prior experience.”

“Learning has taken place if an individual behaves, reacts, and responds as a result of experience in a manner different from the way he formerly behaved.”

“Learning can be defined as relatively permanent change in behaviour potentiality that results from reinforced practice or experience.”

From the definitions of learning given above, following generalisations can be drawn about the nature of learning:

- Learning involves change, although the change can be favourable or unfavourable from organisations' point of view.
- Not all changes can be referred to learning. Learning is the relatively permanent change in the behaviour of an individual. Any temporary change cannot be regarded as learning.
- Learning should be reflected in the individual's behaviour. Any change in the beliefs, attitudes or perception of an individual which is not accompanied by the appropriate behaviour is not learning.

- Change should occur as the result of some experience, practice or training. This also means that any biological change in the human behaviour due to some disease or physical damage is not learning.
- Practice or experience must be reinforced for the learning to take place. If the desired behaviour is not reinforced, it will not be repeated and eventually disappear.

#### **4. Theories of Learning**

Different approaches to learning in the form of theories or models have been established to explain the phenomenon of learning. These theories can be classified as:

- Stimulus-Response theories
- Cognitive theories
- Social learning theories

The theories and their implications for improving the learning and behaviours of the individuals are discussed as follows:

##### **4.1 Stimulus-Response Theories**

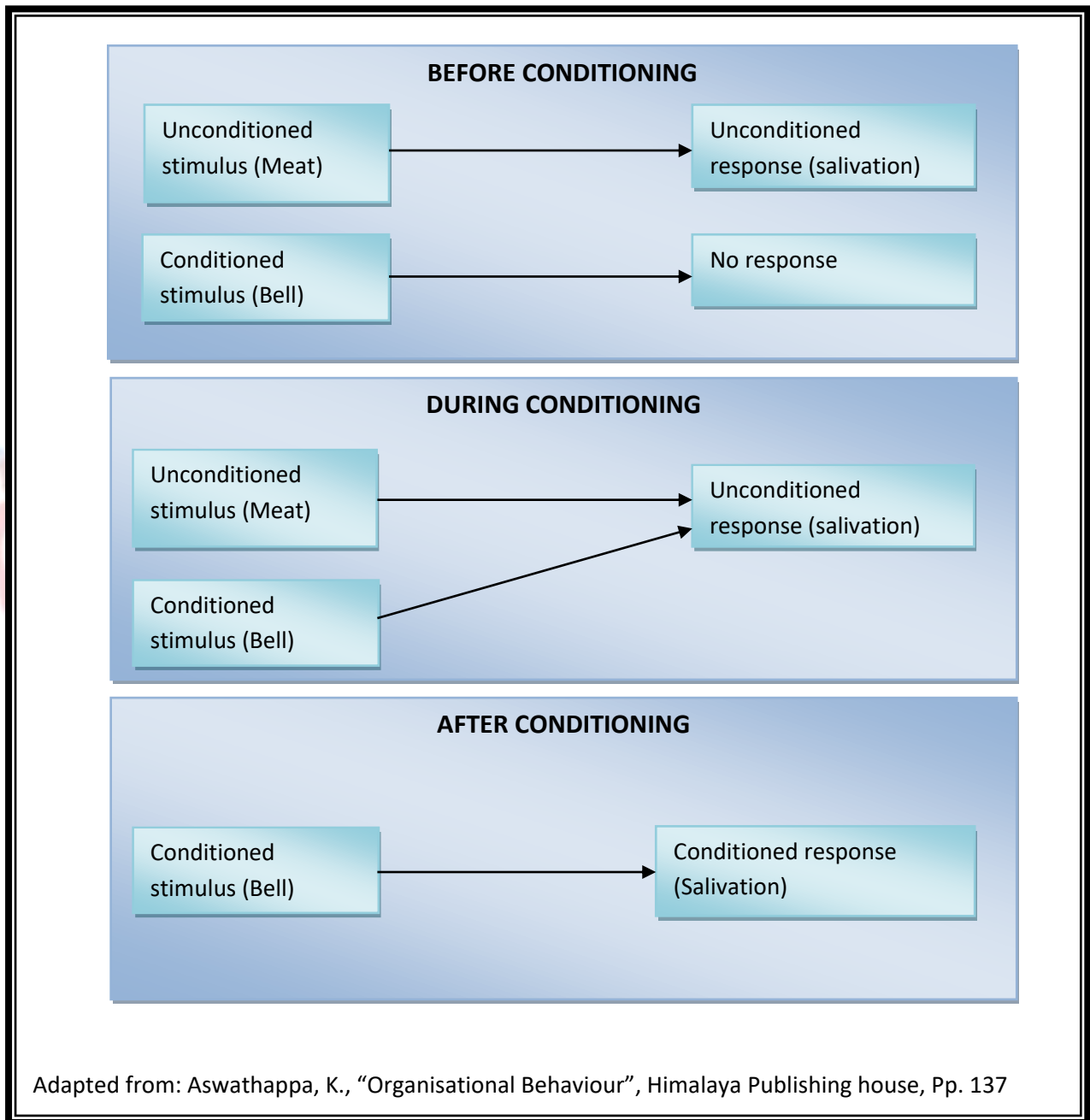
The important stimulus-response theories are: (a) classical conditioning theory (b) operant conditioning theory (c) Thorndike's law of effect.

##### **4.1.1 Classical conditioning theory of learning**

Classical conditioning is defined as association of one event with another desired event resulting in a behaviour. The most popular experiment on the classical conditioning was conducted by a famous Russian psychologist Ivan Pavlov. Pavlov conducted an experiment on dogs and tried to establish a stimulus-response connection amongst them. Pavlov was honoured with a Nobel Prize for his experiment on this subject. In his experiment on dogs, Pavlov made an attempt to relate salivation of dogs with ringing of bell. The amount of saliva secretions were measured with the help of a surgical procedure.

In the first stage of experiment, Pavlov presented a piece of meat in front of the dog. The dog secreted increased amount of saliva in response to the meat. This response was unconditional. Then, he withheld the presentation of meat and rang a bell in front of dog at the same time when meat was presented to him. The dog did not exhibit any salivation or we can say that there was no response.

In the next stage of the experiment, he started ringing the bell at the same time when meat was presented to him. By doing so he linked meat with ringing of the bell. Thus an association between two stimuli viz. the bell and meat was established. He continued with this process for some time. After some time, he found that the ringing of bell alone elicited the saliva of dog even without presentation of meat. Hence, the bell became conditioned stimulus resulting into conditioned or learned response. The experiment is shown in the following exhibit:



Adapted from: Aswathappa, K., "Organisational Behaviour", Himalaya Publishing house, Pp. 137

As given in the exhibit, following observations can be drawn from this experiment:

- Salivation in response to food was unlearned and natural response or reflex. This response was called unconditioned response.
- As the food elicited unconditioned response, it was called unconditioned stimulus.
- When Pavlov presented the food after ringing the bell, the dog responded by salivating and after conditioning, the bell alone resulted into salivation. Thus the bell became conditioned stimulus and salivation was conditioned response.

We can also see many examples of classical conditioning in an organisational setting. For example, in an organisation, departmental heads used to ask the executives and other staff members to update their files and other records, whenever some senior officer of top management was about to visit the department for the purpose of auditing the documents and necessary records. This practice was continued for many years. Eventually, the employees would turn on their best behaviours and look prim whenever they were asked to update their files and records even when this was not paired with visit of senior officer. This was because employees of that department learnt to associate updating of files with visit of senior officer for audit.

Despite of receiving the wide appreciation theoretically, the theory of classical conditioning was criticised by many psychologists on the ground that it represents only a little part of total human learning. Particularly Skinner realised that classical conditioning explains only reflexive behaviours. In reality, the behaviour of people in organisations is voluntary rather than being reflexive. This voluntary behaviour is not a response of specific stimulus. Such behaviours are more complex. The complex behaviour can be understood by operant conditioning theory of learning.

#### **4.1.2 Operant Conditioning theory of learning**

Theory of operant conditioning argues that behaviour is the function of its consequences. B. F. Skinner who practiced the theory of operant conditioning advocated that individuals emit the behaviours which are rewarded and do not emit the behaviours which are not rewarded or punished. In the simple words, it can be said that behaviour is likely to be repeated when the consequences are favourable and is not likely to be repeated when the consequences are not favourable. Therefore, the essence of operant conditioning is the relationship between

behaviour and its consequences. The word 'operant' explains that relationship between behaviour and consequences is a learning process which is developed over a period of time, in which a person changes his behaviour based on his favourable or unfavourable past experiences.

Based on this theory, management can identify this relationship and control the behaviour of employees. Certain consequences can be increased and certain consequences can be decreased to increase the occurrence of the desired behaviour. Various examples of operant conditioning can be seen in the organisations. For example, a boss assures his subordinate that he would be compensated for his overtime in the next appraisal but, he fails to fulfil his assurance during the next evaluation. Consequently, the subordinate will never agree to work overtime whenever the boss will request him to do so. Thus it can be concluded that rewarding consequences increase the response and aversive consequences decrease the same.

#### **4.1.3 Thorndike's Law of effect**

Thorndike's law of effect stated that. "Of several responses made to the same situation, those which are accompanied or closely followed by satisfaction (reinforcement)- will be more likely to recur, those which are accompanied by or more closely followed by discomfort (punishment)- will be less likely to recur." Thorndike in U.S worked on cats, chicks and dogs to understand the learning process. He placed his animals in a 'puzzle box' from which they were required to escape. In order to escape from the box they were required to press the correct lever or pulley. Through 'trial and error', animals eventually learned to press the correct pulley. He explained that response is more important than stimulus in the process of learning.

#### **4.2 Cognitive Theory of learning**

Cognitive theory of learning refers to an individual's knowledge, thoughts and understandings about himself and his environment. This theory assumes that individuals learn the meaning of various objects and events and also the learned responses on the basis of meaning assigned to the stimuli. A cognitive structure is formed in the memory of an individual which preserves and organises the information about various events that occurred in a learning process. Whenever the individual faces some situation or an event, he scans it against his memory to determine appropriate action. Therefore, the action taken by the individual depends upon the cognitive

structure retrieved from the memory. Finally, it can be said that an individual's response is a decision process that varies from situation to situation and the individual's memory for prior such events.

The pioneer of cognitive theory of learning is Edward Tolman who developed this theory through controlled experiments. He conducted a laboratory experiment using rats. He showed that rats learned to run through a complicated maze to reach to their goal of obtaining the food. Rats developed expectations at every choice point in the maze. Thus they learnt to expect that certain cognitive cues related to the choice point ultimately lead to the food. Finally, when the relationship between cues and expectancy was strengthened, learning took place because cues led to expected goals.

Cognitive theory is different from stimulus-response theories. Stimulus-response theories assume that learning is the function of stimulus-response relationship and ignored the role of individual himself in the learning process. On the other hand, cognitive theory recognises the role of an individual in receiving, memorising, retrieving and interpreting the stimulus and reacting to it. Today, the cognitive approach of learning is very much relevant and in OB this approach is mainly applied to the theories of motivation.

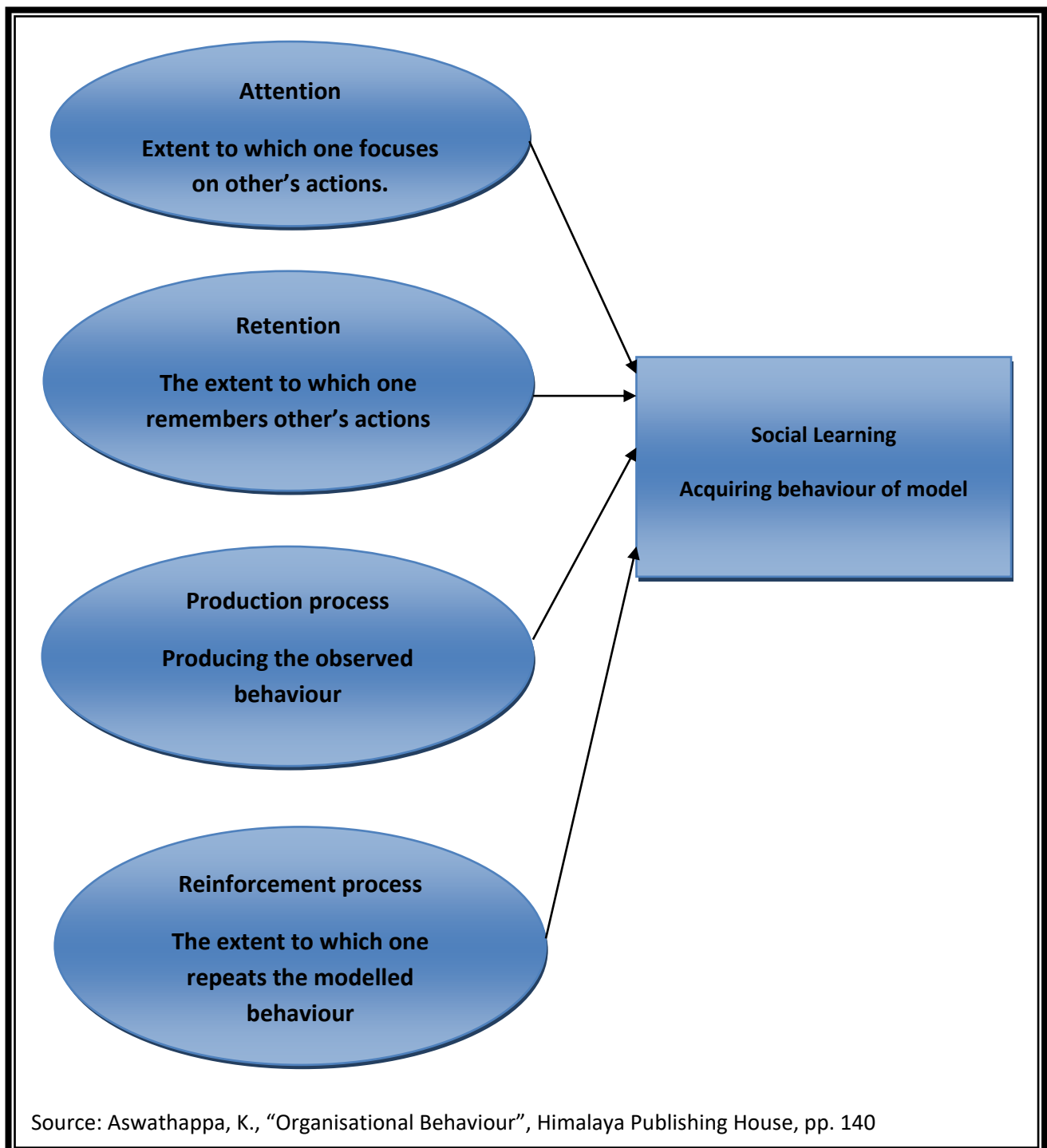
#### 4.3 Social Learning theory

The most popular social learning theory is Bandura's Modelling theory. This theory emphasises on the importance of observing and modelling the attitudes, behaviours and emotional reactions of others. The theory explains that much of what we learn is the result of observing and imitating our role models such as parents, teachers, peers or celebrities. The theory assumes that learning is not only the result of environmental determinism (classical and operant conditioning view) or individualism determinism (cognitive theory) but, it is combination of both. In observational learning, the influence of the role model is the centre of learning. According to this theory, the influence of role model on the individual is determined by four processes:

- **Attention process:** This process explains that people learn from the role model when they pay attention to their critical behaviours. Therefore, individuals tend to be influenced by the models that are more attractive and appear similar to them.



- **Retention process:** This process explains that learning from the model will depend upon how well the individual retains model's actions and behaviours even after the model is not available to the individual.
- **Production process:** This process involves recalling model's behaviour and performing own actions by matching them with the actions performed by the role model.
- **Reinforcement process:** This process explains that individuals will repeat the modelled behaviour if it is rewarding. Behaviours that are reinforced receive more attention and are performed more often. The four processes are given in the following exhibit:



The principles of Bandura's theory can be summarized as follows:

- Organising and rehearsing the modelled behaviour symbolically and then performing it clearly facilitate the process of observational learning.
- Individuals are more likely to adopt the modelled behaviour if the consequences are favourable.
- Individuals are more likely to adopt the modelled behaviour if the model is similar to the learner.

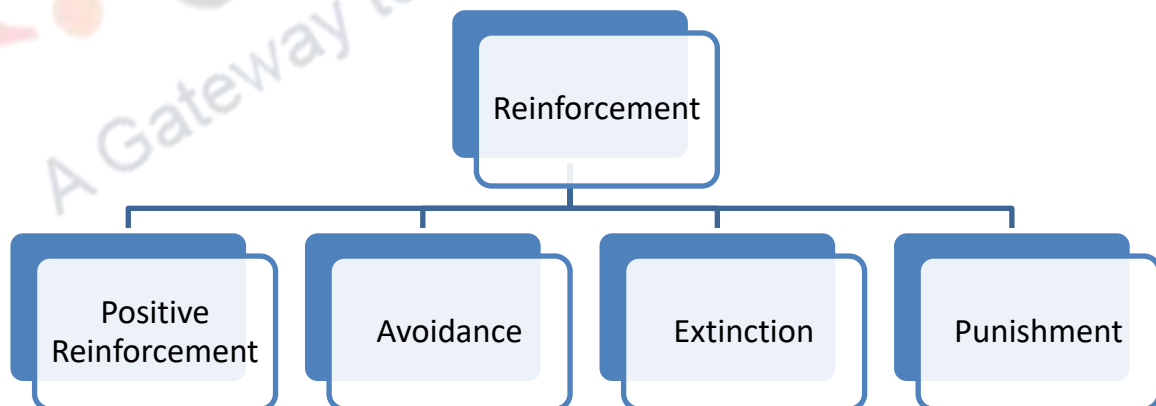
## 5. Principles of Learning

Principles of learning help the managers gain maximum efficiency in a learning situation. However, blind observance to these principles can cause damaging effects than the gain. Therefore, each principle should be carefully interpreted and applied after considering the nature of task being learned and the context in which it is being learned. Some important principles of learning are explained as below:

- Motivation:** Without motivation learning cannot take place. Motivation is the basic principle of learning. Motivation can be seen at different levels of complexity in different situations. In an experiment conducted by Edward Tolman, the hungry rat learnt the path through a complex maze to the food. In the experiment conducted by Thorndike, desire to escape from the puzzle box motivated the animals to learn the way to escape from the box.
- Knowledge of Results:** It is a common fact that knowledge of one's own performance is essential for learning. Feedback of the performance stimulates the individual to take corrective action if there is any deviation in his performance.
- Reinforcement:** Reinforcement is the most important principle of learning. Reinforcement can be defined as anything that both increases the strength of response and tends to induce repetitions of the behaviour that preceded the reinforcement. In simple words, reinforcement refers to the consequences of behaviour. Reinforcement is external environment based. It is described as external environmental events that follow a response. There are four basic forms of reinforcement viz. positive reinforcement, avoidance, punishment and extinction.
  - Positive reinforcement:** Positive reinforcement strengthens and increases the behaviour by offering desirable consequences. In simple words, positive reinforcement is the reward for a desired behaviour. The reward should be such that which stimulates individual's desired

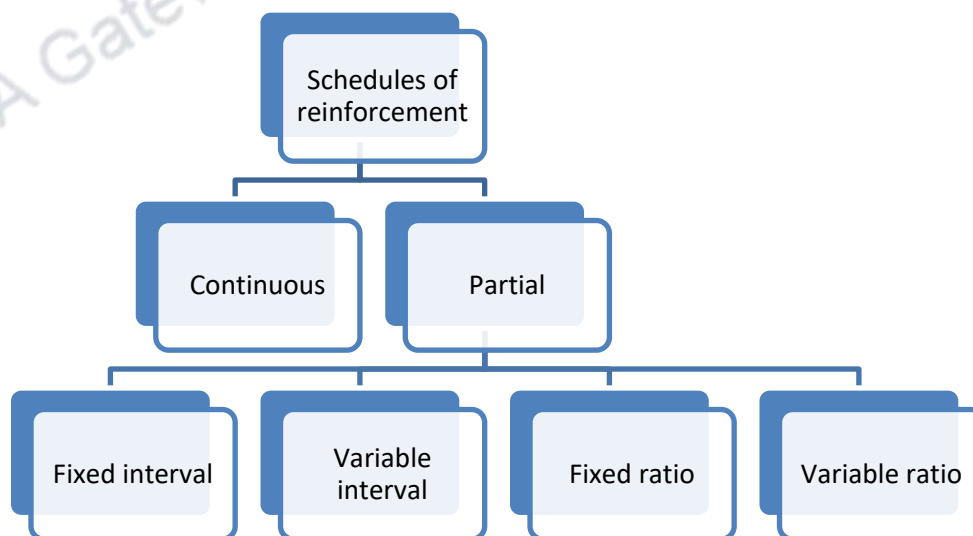
behaviour. For example, if an employee performs extremely well in the organisation and receives awards for the same, the probability of repeating the same behaviour will increase.

- b. **Avoidance:** It is also known as negative reinforcement. It is another alternative of increasing the desired behaviour. In this, instead of associating a reward with the desired behaviour, the individual gets an opportunity to avoid the punishment by displaying the desired behaviour. For example, a manager usually criticises his subordinates for not achieving their targets. The employees will achieve their targets to avoid the criticism.
- c. **Extinction:** Whereas positive reinforcement and negative reinforcement are the ways to increase the occurrence of desired behaviour, extinction refers to decreasing the frequency of undesirable behaviour. When the rewards are withdrawn from the behaviours which were earlier associated with the rewards, frequency of such behaviours will tend to decrease or eventually extinct.
- d. **Punishment:** It is also used to decrease the occurrence of undesired behaviour. Punishment refers to the presentation of an unpleasant or an aversive consequence of undesirable behaviour. For example, in an organisation written warnings, pay cuts or terminations are given for the undesirable behaviours like theft, financial embezzlement, damaging the property and coming late consistently etc.



iv. **Schedules of Learning:** Reinforcement does not always follow a particular response. An employee, who always finishes his assignment on time, sometimes receives recognition and appreciation and sometimes is ignored. Schedules of reinforcement refer to the pattern or timing of administering the reinforcers for the desired behaviour. Schedules of reinforcement are of two types: Continuous and partial.

- **Continuous schedule:** Continuous schedule reinforces the desired behaviour every time it is displayed. The reinforcement is immediate.
- **Partial schedule:** In partial or intermittent schedule, the behaviour is not reinforced every time it is displayed but, reinforcement is often enough to make the behaviour worth repeating. Partial reinforcement can also be classified into four categories based on timing and pattern of reinforcement.
  - **Fixed interval schedule:** When reinforcement is given at fixed time intervals.
  - **Variable interval schedule:** When reinforcement is given at variable times. In other words, reinforcement is given at random times so that nobody can predict the timing of reinforcement.
  - **Fixed ratio schedule:** In this method, reward is given after the fixed number of desired responses is displayed by the employee.
  - **Variable ratio schedule:** In this method, rewards are offered after variable amount of desired responses.



## 6. Learning and OB

Learning is regarded as the fundamental variable influencing human behaviour. It affects almost all aspects of organisational behaviour too. An understanding of the concept of learning helps the managers to increase the occurrence of desirable behaviours and decrease the occurrence of undesirable behaviours of employees. Apart from this, learning also explains certain attitudes and behaviours of managers towards their subordinates. Learning process influence the day to day interactions both casual and formal held among the members of the organisation.

## 7. Summary

With every new experience and every new event or situation, we learn something new. But, this concept of learning is purely theoretical. In real terms, learning can be described as the modification of one's behaviour through practice, training and experience. Learning essentially can be described as relatively permanent change in the behaviour as a result of prior experience, practice or training. Different approaches to learning in the form of theories or models have been established to explain the phenomenon of learning. These theories can be classified as: Stimulus-Response theories, Cognitive theories and Social learning theories. Among stimulus-response theories, three most popular theories are classical conditioning theory, operant conditioning theory and Thorndike's law of effect.

Classical conditioning is defined as association of one event with another desired event resulting in a behaviour. The most popular experiment on the classical conditioning was conducted by a famous Russian psychologist Ivan Pavlov.

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