CHAPTER 5

Learning

INTRODUCTION

Learning brings relatively permanent change in human behaviour that occurs as a result of experience. All complex behaviour is a learned behaviour. If we want to predict and explain behaviour, we must understand how people learn. Learning involves change in behaviour. It is continuous process, which occurs all the time. We cannot see learning but we can see changed behaviour as a consequence of learning. Learning changes attitude of individuals to a large extent. An individual reacts to any situation or responds to instructions in particular fashion, that fashion or style is caused due to learning. Theoretical approach to learning incorporates **behaviourist, cognitive** and newly emerging **social learning** theories. Understanding of these theories is important to the study of organizational behaviour.

Theories of Learning

Classical Conditioning – behaviourist theory

"Classical conditioning can be defined as a process in which a formerly neutral stimulus when paired with an unconditional stimulus, becomes a conditioned stimulus that illicit a conditioned response. (Luthans 1995)¹

Ivan Pavlov a psychologist who won Nobel prize introduced classical conditioning theory. The experiment envisaged dog as a subject. Pavlov carried out this experiment in three sequential stages. In **stage one**, he presented meat (unconditional stimulus) to the dog. He noticed a great deal of salivation (unconditional response). In **stage two** he only rang up the bell (neutral stimulus), the dog had no salivation. In **stage three**, Pavlov was to accompany the offering of meat to the dog along with ringing up of bell. After doing this several times, Pavlov rang up only bell (without offering of meat to the dog). This time the dog salivated to the ringing up of bell alone. Pavlov concluded that the dog has become classically conditioned to salivate (response) to the sound of the bell (stimulus). It will be seen that the learning can take place amongst animals based on stimulus – response (S-R) connections. The study was undoubtedly single most famous study ever conducted in behavioural sciences. It was a major break through and had a lasting impact on understanding of learning.

This stimulus – response connection (S-R) can be applied in management. Historically when a CEO visits an organization, production charts are updated, individuals put on a good dress, window panes are cleaned and floors are washed. What all one has to do is to just say that the Top Boss is visiting. You will find that all above work is undertaken (response) without any instructions. Because the people in the organization have learned the behaviour (conditioned). It has caused a permanent change in the organization (S-R connections). Robbins² states that classical condition is passive. Something happens and we react in a specific way. It is elicited in a response to specific, identifiable events. As such, it can explain simple reflective behaviours. But most behaviour - particularly the complex behaviour of individual organizations is emitted rather than elicited. It is voluntary rather than reflective.

Operant Conditioning

Operant conditioning deals with Response—Stimulus (R-S) connection. The concept was originated by B.F. Skinner. He felt that more complex behaviour couldn't be explained by Classical Conditioning concept. He states that most human behaviour operates based on the environment. **Operant Conditioning** is concerned primarily with learning as a consequence of behaviour (R-S). In Operant Conditioning particular response occurs as a consequence of many stimulus situations. Stimulus typically serves as a cue for a particular response. In his concept a "response" is first evaluated out of many stimulus, which is environmental in nature. Behaviour is a function of consequences. It is voluntary in nature. Re-inforcement increases the probability of occurrence. Behaviour is learned and is not a matter of reflects. If we create learning consequences, the probability of specific forms of behaviour increases. For example an individual will take a long trek (Response) to library because he knows he would be able to get a desired book (Stimulus), (R-S connections). Individual would work hard(R) because he knows that he would be able to get praise, or even promotion (S). Operant Conditioning has greater impact on learning as compared to Classical Conditioning.

Cognitive Theory - Cognitive Approach

Edward Tolman was recognized as pioneer of Cognitive Theory. The theory consists of relationship between environmental (cognitive) cues and expectations. He used white rat in his psychological experiment of Cognitive theory. He found that the rat could run through critical path with particular intention of getting food (goal/objective). In the experiment, Tolman established certain *choice points* where expectations were established. The rat learned cognitive *cues* at various choice points, which would raise its expectation to move forward to the objective (food). Thus the rat turned to acquire food, based on relationship of *Cues and Reward* or expectations. This theory was later applied on human resources where incentives were related to higher performance.

Social Learning – behavioural approach

Social learning approach is a behavioural approach. The approach basically deals with learning process based on direct **observation** and the **experience**. It is achieved while interacting with individuals. In social learning people observe, alter and even construct a particular environment to fit in the social behavioural pattern. Individuals learn a great deal from watching attractive models and they copy their behaviour and display the same.

Children copy the behaviour of their parents, adults, and copy cinema actors/actresses in various styles. Social learning is practiced in organizations by observing various cultural, and social practices. This phenomenon is distinctly visible in defence services where cadets opt for a particular regiment based on the performance of their instructors (role model). In industrial organizations leader must display a role model so that subordinates copy the style of functioning. An appropriate behaviour can be predicted that would contribute towards achieving higher individual satisfaction level and organizational goals. The influence of model is central to the theory of Social Learning. The following processes determine the extent of influence that a model may have.

Attention Process

It is human tendency to get attracted to impressive models especially those, which suits the individual's temperament and match expectations. This causes social learning.

Retention Process

Learning is basically adapting to a change on permanent basis. Models retention will depend upon the attractiveness of the model. Advertising agencies therefore project attractive models in promotion to their product or services. The advertisement retention aspect is at the core of the concept of the theory that the buyer must be able to retain maximum of what has been projected in the advertisement. Evaluation of such retention (learning) is measured by pre- test and post-test (advertising experiments). This will measure the effectiveness of learning through observation of a particular model.

Motor Reproduction Process

Motor reproduction deals with evaluating the impact of the model on individual. Does individual display the same behaviour as is displayed by the model? If the learning were effective then the learner would be able to display a desired (reproduction) pattern of behaviour.

Re-inforcement Process

Individuals will be able to display positive behaviour or even attitude if a particular activity is rewarded by way of positive incentives. An accountant would be able to maintain accounts correctly and produce a balance sheet when needed if he is encouraged, his work is appreciated or he is given monetary or non-monetary incentives. Re-inforcement is being practiced by various organizations to achieve a patterned behaviour free of conflict situations.

APPLICATION OF REINFORCEMENT TO SHAPE BEHAVIOUR

Management of human resource plays a dominant role in the growth of an organization. Various material inputs in the organization can be put to its optimum utilization if the employees display positive attitude towards organizational systems, processes, activities and have an appropriate interpersonal behaviour. This is possible if a manager is able to identify human requirements (needs) try and satisfy them in an unambiguous manner. This can be achieved by applying re-inforcement to individuals in the course of their performance. If a cleaner keeps the workshop floor neat and clean at all the times, he should be awarded so that he continues to display the same behaviour.

A soldier was publicly congratulated for smart salute by his commander showed an over all higher standard of salutation in the entire defence unit. It has happened (at no cost) because of the re-inforcement received and soldiers showed an overall higher standard in the performance of their duty. Application of re-inforcement model developed by Skinner could be applied with positive results in the organization.

Continuous Schedule

Continuous re-inforcement re-inforces the desired behaviour of an individual in the organization. When a worker is required to do a particular assignment and if he does it on time he should be rewarded for the same. Because he would continue to display the same behaviour every time with the hope of reward. It has been seen that when the re-inforcement (reward) is withdrawn the individual is unlikely to do the job on time. It is not possible for the manager to keep a tag of each and every individual and the activities they perform in the organization. It is therefore important to lay down the policy in this respect so that employees achieve higher productivity by displaying desired (standard) behaviour.

Partial Re-inforcement Schedule

In partial re-enforcement every positive act of individual is not re-enforced (rewarded). In this schedule individual's behaviour is re-enforced after a long gap and his accumulated behaviour is rewarded. It has been observed that partial re-enforcement has a fair chance of individual behaving in a positive and desired manner because he feels that sooner or later his work would be recognised. Partial re-inforcement has a wide application in the organizations. Partial re-inforcement can be classified into four categories as shown in Figure 5.1 below.

Schedule of re-inforcement		
	Interval	Ratio
Fixed	Fixed interval	Fixed ratio schedule
Variable	Variable interval	Variable ratio schedule

Fig. 5.1. Schedule of re-inforcement

Fixed Interval Schedule

The re-inforcement is related to the hygiene factors or administrative factors of the organization like salary, organizational policy, interpersonal relationship, status and the like. In the interval schedule the critical factor is time. As a manager, one has to apply reinforcement schedule on a fix interval of time. Daily wagers will look forward to get their salary at the end of the day and those on piece rate of payment would work hard to earn maximum. Fixed interval re-inforcement is not very effective. The re-inforcement is of temporary nature and does not motivate individuals on a long-term basis.

Variable Interval Re-enforcement

In this method re-enforcement is not based on the fix period of time. It varies from job to

job. Individual's behaviour can be modified based on incentives on a variable time period basis. Promotion, upgradation, or incentives in salary structure coming on different timings that are not on a pre-fixed basis motivate individuals and increment in productivity is achieved. Variable interval re-enforcement schedule generates higher rate of responses and is more consistent.

Fixed Ratio Schedule

Fixed ratio schedule is related to administration of reward system after the individual accomplishes a particular volume of work. A worker is paid or a re-inforcement is administered after manufacturing of particular pieces of product under piece rate of payment. The individual works hard and displays a sense of devotion to his work because of the proposed reward for which a particular quantity has to be manufactured. The response level under fixed ratio schedule is higher than under an Interval ratio schedule.

Variable Ratio Schedule

Variable ratio is similar to fix ratio schedule except that in variable ratio, quantity is not fixed. Re-inforcement is awarded to an individual based on the situation to situation. For example a sales person may be awarded a higher commission on the sales he made irrespective of volume of sales. The incentive may also be given based on number of successful sales calls made by the sales person. Variable ratio schedule has been most effective to modify individual behaviour or ensure sustenance of a particular behaviour. The method draws a very rapid and positive response at a desirable level. This type of reinforcement is considered to be very effective tool to obtain willing obedience of subordinates in a particular situation. The impact largely would depend upon the timings and volume of work performed by the individuals in the organization and the skill of the moderator.

Re-enforcement

There are four types of re-enforcement namely *Positive*, *Negative*, *Punishment* and *Extinction*. Positive and negative re-enforcement seeks to achieve a desirable behaviour by two different approaches while punishment and extinction prevents undesirable behaviour. These are discussed in the succeeding paragraphs.

Positive Re-enforcement

Positive re-enforcement is institution of reward for a particular desired behaviour. The intensity of reward must stimulate a desired behaviour. "Shram Shri" award is a reenforcement or a reward for innovation in production. This is instituted so that individual works to achieve a high standard. The awards instituted in film industry is to stimulate artistic display by artists, which will have a lasting impact on the public. An array of awards in defence services is to stimulate bravery during peace and war environment amongst soldiers and improve over all efficiency. Arjun awards in the area of sports are to achieve excellence in sports with a view to achieve skill and efficiency. Positive reenforcement to be effective should have following pre-requisites

 The reward should match the expected behaviour graph and need spectrum of awards. Monetary rewards activate some people while others would be happy with just a praise or recognition.

- The re-enforcement or rewards should be contingent to the degree of performance. Higher the performance required, higher must be the recognition (Reward system).
- Rewards must be given on time. Delay in awards may not have desired effect and the impact of reward would be lost. Field Marshal Slim used this tool very effectively during World War II when he used to give gallantry awards to the soldiers for their acts of bravery on the spot in the battle field (front line) thereby intending to achieve high morale and success in fierce battle actions.
- Re-enforcement must be applicable universally without any structural variations. Disparity in rewards is counter-productive.

Negative Re-enforcement

In organizations acts are committed or omitted. For commission of desired acts a reward is given while rewards can also be given for displaying behaviour by terminating undesired consequences. Both, positive and negative re-enforcement techniques are for strengthening desired behaviours. In former employees put in their best and work hard to get financial and other rewards but in the later case of re-enforcement employees work in such a way that they do not invite negative comments or reprimand from superiors. In work places, parking of vehicle at right places, following instructions on training, abiding by safety regulations, assisting employees in performance of their duty are the forms of negative reenforcement. Because employees would follow instructions to avoid negative consequence of undesired behaviour.

Punishment

Punishment is awarded to an individual for undesired consequences of behaviour. It is a method of decreasing frequency of occurrence of unpleasant behaviour and a tool generally used by organizations for corrective or modification of individual behaviour. It is generally treated as an unpleasant consequence contingent upon undesired behaviour. It is corrective in nature and intended to reduce probability of its recurrence. Punishment acts as deterrence to other individuals and prevent them from doing an undesired act. Punishment should not be given collectively to a group. Punishment should be awarded to an individual who is habitual of undesired behaviour. Punishment can be reduction of salary, non-granting of increment, fine and even removal from service. The gravity or the scale of punishment will depend upon the nature of behaviour displayed by an individual. Punishment should be used sparingly and not as a matter of routine. It should be corrective in nature and not punitive. It should focus on an act deserving punishment and not the subject person. Punishment must be awarded with due care and made public so that it acts as deterrence. While applying punishment as behaviour modification for skill development, due care must be taken by organizations to avoid legal and social fall out. Following points should be kept in mind while applying punishment

Authority

Authority who is entitled to award punishment must be specified and notified to all concerned.

Process

All employees should know the process of punishment. If required this should be included in training programme so that awareness is brought about.

Show Cause

Individual must be given opportunity to justify his actions. No arbitrary decision should be taken.

Board for Inquiry

An impartial body of persons should be formed to investigate each event to decide whether the punishment is required to be awarded. The gravity of the offence, the probable scale of punishment and the individuals involved in the commission of an act.

Time Bound

All actions must be time bound and individual awarded punishment in time

Gravity

Punishment must be commensurate with the gravity of the offence.

EXTINCTION

Extinction refers to withdrawing of re-enforcement or reward so that the happening becomes less frequent and ultimately dies off. The method involves withdrawing positive re-enforcement earlier granted. Eliminating any re-enforcement is called extinction. For example students are given extra coaching for higher performance. Over a period of time this positive re-enforcement leads to students increased dependency on coaching by a teacher. So if this facility (re-enforcement) is withdrawn, it is with the aim of modifying behaviour by extinction, so that the students form the habit of self-study and therefore the learning takes place that leads to behaviour modification in a group. Ignoring an individual in organization for his unsuitable behaviour or ignoring a lazy person in a group is some of the forms of extinction. Because it is expected that extinction would lead to behaviour modification.

APPLICATION OF LEARNING AND ORGANIZATIONAL BEHAVIOUR MODIFICATION

Some of the behaviour modification techniques are given below which may be used in the organization

1. Use of Lotteries to reduce Absenteeism

Attractive prizes can be included in lottery that can be used gainfully to achieve reduction in absenteeism. It has been found that there was no absentee in an organization with the above scheme because management decided that only those individuals could participate in the lottery that has no absenteeism. This has led to individuals attending work regularly and brought about behaviour modification. Absenteeism reduced to a large extent and workers displayed a sense of responsibility that led to increased productivity and higher job satisfaction.

2. Work pay Vr sick pay

Organizations have leave policy. Apart from other leave, there is a provision for few days of sick leave in a year. It has been noticed that most of the employees avail sick leave with impunity whether they are sick or otherwise and therefore organization cannot avail of

their services. But if sick leave can be converted in to payment of bonus up to a certain extent, the employees would choose to avail of financial benefits and would not absent themselves under the pretext of being sick. This will improve satisfaction level of employees and would not hamper productivity.

3. Training and Development

Training and development programmes must be run systematically and in a preplanned manner. The author had asked employees in an organization as to what are the expectations of workers from owners of any organization? I was glad to hear that the employees expected two things. First, they should be so trained in their profession that they are able to take up next/ higher job position and the **second**, employees expect that all their entitlements be paid on time. This is biggest contribution an organization can make to the employees. The training and development programmes must be very effective. Social learning theory must be applied and a role model displayed during training. Apart from imparting job related training, it must also enrich value system, adapt a way of life, new life concept and develop a total ethics based approach to life. If this were achieved, all organizations would have conflict free behaviour. Employees would develop a sense of belonging to the organization. Japanese precisely developed this and followed social learning concept. The efficiency of training and development will depend upon the skill of the trainer, the organization culture that management would like to practice and the level of commitment.

4. Mentoring Programmers

2nd lieutenant of an Army regiment was asked as to why he chose to join that regiment. The officer replied that his mentor was from that regiment which interested him the most during his training period. Most of the newly commissioned officers chose their regiment because of the smartness of their mentors, dress they wear and skills they display during tactical exercises, briefings and on firing ranges. Mentors therefore must display model behaviour so that subordinates emulate them. Mentors should ensure to develop sense of responsibility amongst the subordinates who should be able to take higher jobs and work for the organization. They are expected to develop positive attitude towards subordinates, job in hand and achieve a sound personality based on culture and social values. This can be achieved by full dedication on the part of both mentor and the trainee.

5. Discipline

Behavior modification can be achieved by laying down minimum standard of discipline in the organization. Defense organizations are most disciplined organizations because they do not compromise on the standards, be it related to training, work, supervision, accounting or disbursement of salary and wages etc. The leader should set an example for his subordinates. In organization be it production intensive or service sector, managers should insist that all his subordinates strictly follow the timing of work, dress code, display courteous behaviour when interacting with others and accomplish their assigned task on time. Defaulters should be dwelt with strictly. Any lethargy in programme implementation will not bring behaviour modification. Manager must work in the same environment as the workers, eat the same food and wear the same dress and should display alertness and physical toughness. They should be able to work effectively under stress and strain and should not show any signs of tiredness to their subordinates. It is combination of leadership qualities and role played by the managers that will establish high standards of discipline amongst all employees of the organization.

5. Self-Management

Learning concepts are meant for modifying the behaviour of others. These theories are also applicable for self-management. Individuals should lay down personal standards, objectives relating to personal growth, identify various courses of action to adopt and modify self-attitude and behaviour. Individuals should be able to compromise on self-interests for overall good of the organization. Regulating various activities and achievement of personal as well as organizational goals would be easier in an environment of self-managed organizations.

SUMMARY

Learning refers to permanent change in behaviour of the individual. It is a continuous process. Ivan Pavlov has suggested classical conditioning theory of learning where stimulus - response (S-R) concept has been applied. Pavlov suggests that S - R phenomenon can be applied in the management and employees should be so trained that they act in a desired manner. Skinner on the other hand recommends Response – Stimulus (R-S) concept. The researcher believes that an individual behaves because of higher probability of response. Edward Tolman has propagated Cognitive Theory of learning. He explains the relationship of environment and expectations. In the recent times social learning has been quite popular because of its simplicity. It is related to modification of behaviour based on observation. The change in behaviour is based on the attention process, retention process, motor reproduction process and lastly the reinforcement process. For behavioural change reinforcement plays a vital role. Managers must apply positive reinforcement based on various schedules. Negative reinforcement deals with the restrictions like preventing promotion etc. Punishment is also considered as a factor for behaviour modification. Punishment must be timely, awarded only by the competent authority. This has a salutary effect on employee behaviour. Learning process must be planned properly and executed sincerely in the organization. Use of incentives, training and development schedules, mentoring programmes, self-management and laying down minimum disciplinary standards are some of the learning strategies that may be adopted by organizations.

TEXT QUESTIONS

- Q. 1. Explain the concept of learning. How learning leads to behaviour modification.
- Q. 2. How do you relate Pavlov's experiment to human behaviour?
- Q. 3. What are various theories of learning? Explain in detail with suitable examples.
- Q. 4. Explain in detail the four basic reinforcement strategies to achieve desired behaviour
- Q. 5. Explain punishment as a strategy for behaviour modification. What special care must be taken?
- Q. 6. Explain schedule of reinforcement. In your opinion, which one of these schedules is most desirable for behavioural change?

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Case

MR. VICE CHANCELLOR NEEDS LEARNING THROUGH DOINGS

Often changes surface the organizations with the new Heads of the Organizations. So is true in case of an infant Central University in the North-Eastern Region of India. As the Vice Chancellors in the University system are migratory birds for a certain period of 3 or 5 years to stay in the University, the previous Vice Chancellor left and the New Vice Chancellor joined the University with his own type of mission and vision for the University. He, from his first day in the University, started thinking and working to achieve his mission and vision. In order to monitor the things/ happening in the University in right direction, he formed an informal advisory committee consisting of some 20 Professors of the University. He also evolved a *modus operandi* for this advisory committee.

Fortnightly, he started holding meetings with the group of advisory committee in order to keep them informed and teach them the specifics of any new change in the Government and the University Grants Commission policies and procedures that might affect their work. He also used to discuss priorities and assignments for them. This meeting was also a time and place when the members can share some of the problems and concerns of their respective departments. The meeting is scheduled to begin at 3 P.M. sharp every second and fourth Saturday of the month. Initially, when it was non-teaching duration, the members came on time. Lately, when classes in the Semester System gained momentum, the members have been filtering in every five minutes or until almost 4 P.M. This made the Vice Chancellor delay the start of the meeting until all the members arrive. During the last few weeks when classes are running in full swing, the meetings have not started until 4 P.M. In fact, at 3 P.M., nobody has shown up. The Vice Chancellor could not understand what has happened. The facts unknown to him were mainly missing a single class in the semester system costs as lot, most of the Professors-Members were two-in-one i.e, the Deans of the Schools and the Heads of the Departments, and non-availability of transport after 5 PM from the University Campus to the city with a distance of 20 kms. Though the Vice Chancellor was seeing the crowd of the students, teachers and non-teaching employees standing by the road-side waiting for highly irregular public transport, everyday while passing through the bus stop in his black glass official vehicle, but was oblivious to think over how they will come back to the city which is 20 kms away from the Campus.

The Vice Chancellor was only concerned how to conduct the Advisory Committee meetings on time. For a moment, he thought to start meeting at 3 P.M. so that meeting is over by 5 P.M. before all, the advisory committee is informal and, thereby, the members are volunteers by nature, and, therefore, he cannot push them or make them get to the meetings on time. On the other hand, the Professor- members, who are in no way less qualified than the Vice Chancellor, didn't care for this advisory committee meetings which are not under the purview of their official duties or jobs.

QUESTIONS

- 1. If you were a consultant to the Vice-Chancellor, what advice would you give to the Vice Chancellor?
- 2. In terms of re-inforcement theory, explain what is happening here and what the Vice Chancellor needs to do to get the meeting started on time.

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