Learning: Meaning, Process and Factors affecting Learning of an Individual, Trial and Error Theory and Classical Conditioning Theory

MEANING OF LEARNING

Learning is said to be equivalent to change, modification, development, improvement and adjustment. It is not confined to school learning, cycling, reading, writing or typing but it is a comprehensive term which leaves permanent effects or impressions on the individual. Some of the definitions of learning are as follows:

- 1. **Daniel Bell**, in Encyclopaedia of Psychology, says that "Learning is modification due to energies of organism and environment impinging on the organism itself."
- 2. Encyclopaedia of Educational Research reads, "Learning refers to the growth of interests, knowledge and skills and to transfer of these to new situations."
- 3. Gates says, "Learning is modification of behaviour through experience and training."

4. **Crow and Crow** are of the view that "Learning involves the acquisition of habits, knowledge and attitudes."

5. Skinner defines "Learning as acquisition and retention."

Characteristics of Learning:

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- 1. **Progressive change in behaviour:** Learning brings progressive change inbehaviouras the individual reacts to the situation and i.e, why learning is known as improvement.
- 2. Learning is motivated by adjustment: The individual has to adjust to new environment.
- 3. Learning is universal in nature: All animals learn. Man is a rational animal and he learns more.
- 4. Learning is never ending growth: We always inspire to learn more and more. One achievement leads to further incentive, pursuit and effort.
- 5. **Learning is Continuous:** Learning is a continuous process and not restricted to childhood period. It goes with life. Death is its end point.
- 6. Learning is goal-directed or purposive: When the purpose or goal is more clear, vivid and explicit, the learning becomes meaningful and effective to the learner.
- 7. Learning is active and creative: Learning largely depends upon the activities of the learner. It is said that no learning can take place where there is no self-activity. Learning is, therefore said to be the result of activity and experience. It is creative experience of all knowledge.
- 8. Learning is aroused by individual and social needs ie, learning depends upon individual-his needs, problems, interests, attitudes, ambitions, aspirations and needs of the society. In case of some individuals, learning may be quick and fast and in others it may be slow and steady. Learning is also affected by social environment. No learning can take place in the absence of environment.

- 9. Learning is response of the whole individual to the total situation: individual reacts to the total learning situation as a whole.
- 10. **Learning is transferable** ie., transfer takes place in learning but amount of transfer may vary. Transfer occurs when there is similarity of contents, techniques, ideals, procedures and attitudes. Transfer leads to economy in learning as it takes place from one field of study to another and from classroom situation to life situation.
- 11. Learning is possible on cognitive, affective, and conative side: Acquisition of knowledge is cognitive, modification of emotions is affective and acquisition of skills and habits is conative.
- 12. Learning is process and not a product: For a man in the street end product is seen as learning. For a psychologist, learning is a process which can be summed up in the following steps:
 - (a) Motive or need: First of all motive or need arises. Motive is force which impinges or compells the individual to behave or to react or do a particular task.
 - (b) Goal: If motive or need is there the goal is set up by the teacher or anybody else.
 - (c) Adjustment: Thirdly, adjustment on the part of child begins.
 - (d) Changes: Changes in the behaviour of the child take place.
 - (e) Fixation or stabilisation: Later on those changes in the behaviour of the learner are stabilised.

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FACTORS AFFECTING LEARNING OF AN INDIVIDUAL

(1) PERSONAL OR INDIVIDUAL FACTORS:

Personal factors of learning can be studied under psychological and physiological factors:

- (A) **Psychological factors:** Important personal psychological factors influencing learning are given below:
- 1. **Maturation:** Learning depends upon maturation. If the individual is matured to learn a particular activity, he will learn effectively. If the individual is not mature, learning will not be effective.
- 2. Readiness: If the learner is ready to learn a particular activity, he will learn better and quickly.
- 3. Atitude and aptitude: Favourable or positive attitude is must to get success in any field of endeavour. Favourable attitude towards the job or work makes one more active and enthusiastic and favours learning. Negative attitude of the pupil delays learning. Suitable aptitude of the person helps in quick and effective learning.
- 4. Capacity: The greater the capacity for learning a person has, the better will be the learning.
- 5. **Motivation:** Motives like (1) reward, (2) success, (3) competition, (4) level of aspiration, (5) punishment are powerful incentives to the learner for better learning
- 6. Attention and interest: If the learner is motivated to learn a particular task, he will take more interest in the task with full attention and hence he will learn that task better. Best learning takes place when the teacher arouses attention and interest of students.
- 7. Memory: A learner who has good memory will learn quickly and effectively.

- 8. **Mental health:** A child who is mentally healthy ie, free from frustrations, conflicts, anxieties and worries will learn better than the child who is not mentally healthy.
- 9. **Goal:** Learning depends upon goal of the learner. Appropriate, stronger and clear goal of the person (learner) is conductive to learning.
- 10. **Will:** The stronger the will and determination of learner (person) the quicker and effective will be the learning.
- 11. **Intelligence:** Intelligence of the learner is also positively related to learning. It facilitates effective learning. The greater the intelligence of the person, the more effective may be his learning.
- 12. Mental fatigue: Freshness promotes learning and mental fatigue inhibits learning.
- 13. **Sensation and perception:** Sensation and perception are the basis of cognitive learning. The stronger the power of perception, the greater will be the amount of learning.
- 14. **Needs:** Physiological, psychological, educational, vocational and social needs of the learner (person) are conductive to learning.
- 15. Aspiration: High level of aspiration facilitates learning.

(B) Physiological Factors:

- 1. Food and nutrition: Poor food and nutrition have an adverse effect on learning while rich food and nutrition contribute towards better learning.
- 2. **Drugs:** Studies have shown that alcoholic and narcolic drugs, use of tobacco, and addictive items are harmful for the neuro-muscular system of the body and consequently, learning may be hampered.
- 3. **Physical fatigue:** Fatigue may be physical or mental. Fatigue causes boredom and indolence and has negative effect on learning. Rest and freshness are helpful in learning.
- 4. **Physiological defects, handicaps and diseases:** Physical defects like visual defects, hearing defects and other handicaps, malfunctioning of glands and diseases like paralysis, tuberculosis, heart disease, epilepsy, cancer, etc. obstruct learning. Studies have shown that even poor vision may cause headache, nausea, and a general disinclination to study. Other organic defects which occur in tonsils, ears, appendix, teeth cause irritability and many other disturbances and negatively affect learning. Physical illness and tension cause frustration and adversely influence learning.
- 5. **Good physical health:** Good physical health is a pre-requisite for effective learning. Sound physical health provides enthusiasm, vigour and vitality for better learning.
- 6. Age: Research studies have shown that learning efficiency increases with ap to certain extent after which it remains stationary for some time and ultimately tends to decrease during old age. Thus, we find that children are speedier and more efficient a learning tasks as they grow older.

(2) Environmental Factors Influencing Learning:

Environmental factors include the following factors:

(1) Task Factors (Content or Material-related Factors): These are the important task factors (content or material-related factors) influencing learning:

1. **Difficulty of the task:** Difficult tasks take more time to learn.Sometimes they discourage children.

2. **Similarity of the task:** Tasks which have some similar elements are learnt better, quickly and effectively.

3. **Meaningfulness of the task:** The more meaningful is the material, the more rapid and easier is the learning. The meaningless material is difficult to be learnt.

4. Length of the task: The longer is the task the more difficult it is to be

5. **Appropriateness of the task:** Appropriateness of the task facilitates learning, This means that the subject-matter should be appropriate to the age level, maturity, intelligence and interests of the students.

6. **Pleasantness and unpleasantness of the task:** Generally, pleasant tasks are learnt quickly than the unpleasant tasks.

(2) Method (Method-related) Factors Influencing Learning:

Important method-related factors of learning are given below:

- 1. Whole and part method: Experiments have proved that generally whole method gives better results than part method. Learning by whole method is intelligent learning, as it helps to find out the meaningful relation and to grasp the material as a whole. Being intelligent learning, it can be retained for a longer time than learning by part method which employs cramming.
- 2. **Recitation method:** Recitation method helps in efficient and effective learning. It arouses active participation of the learner, yields progressive information about the errors and right responses, thereby permitting the correction of errors, furnishes an immediate goal to work for, gives an exact and immediate knowledge of results, favours an aggressive and independent attitude, and helps in the organisation of material.
- 3. **Practice:** 'Practice makes a man perfect' is a well known proverb. Learning is more efficient when practice is distributed at intervals over a period of time than when it is considered in one period as in cramming.
- 4. **Guidance and cues:** Guided learning is always better than unguided learning Guidance saves time and energy of the learner, eliminates wastage and stagnation. But too much guidance should be avoided so that students may not learn the habit of remaining dependent upon others or teachers.
- 5. **Learning by doing:** Learning by doing facilitates learning. So the pupils should be encouraged to learn through activity. Theoretical teaching should be replaced by practical application of knowledge, experimentation and personal application.

- 6. Learning activities and active participation: Learning is active and it requires concentrated efforts on the part of the learner. Students should be encouraged to ask various questions and to take active part in the class.
- 7. **Learning by insight:** Learning by insight helps in retaining (learning) for a longer period of time and minimises wastage of time. Therefore, spoon-feeding or cramming should be discouraged.
- 8. **Time of learning:** Experiments have shown that there are significant variations in learning efficiency during different hours of the day. It has been established that morning and evening hours are the best hours of study. During the day, there is decline in the mental capacity due to noise.
- 9. **Vigorous application:** Slow learning is seldom efficient. Learning vigorously is a great asset and it pays much. The students should be told to work whole-heartedly. They must put their heart and soul white learning something.

(3) Teacher-related Factors:

(1) Methods of Teaching:

Learning is influenced by suitable methods of teaching like:

(1) Lecturing method, (2) Demonstration method, (3) Experimental method, (4)Discussion method, (5) Seminar method, (6) Assignment method, (7) Tutorial method, (8) Programmed instruction method, (9) Individual practical work, (10) Individual work in workshop, (11) Project method, (12) Heuristic method, (13) Field trip method, (14) Play method, (15) Story telling method, (16) Source method, (17) Audio-visual aids like charts, maps, models, pictures, posters, graphs, transparencies, and electronic media like programmes on radio, television, films, overhead projector, etc.

(2) Maxims of Teaching: Learning is facilitated by use of maxims of teaching like to proceed from: (1) Known to unknown, (2) Easy to difficult, (3) Simple to complex, (4) Concrete to abstract, (5) Indefinite to definite, (6) Particular to general, (7) Empirical to rational, (8) Deductive to inductive, (9) Psychological to logical

(3) Atmospheric and Working Conditions:

(1) **Atmospheric conditions:**

(1) High temperature and humidity lower the mental efficiency, (2) Lack of ventilation (3) lack of proper illumination, (4) noise and (5) physical discomfort (as we find in overcrowded schools) hamper the learning capacity.

(2) **Working conditions:** (1) Good location of the school, (2) good internal set-up, (3) adequate accommodation, (4) decoration, (5) healthful and good sanitary conditions are helpful for efficient learning. On the other hand, bad working conditions like distraction, noise, poor light and ventilation, overcrowding, inadequate seating arrangement and uncongenial environment in home and school hamper efficiency of learning.

(5) Organisational set-up:

The organisational set-up of school also influences learning:

1. **Time-table:** Time-table based on sound psychological principles like (1)principle of motivation, (2) fatigue and rest, (3) variety, (4) relative importance of the subject, (5) difficulty level of the subject is favourable to efficient learning. Important and difficult subjects should be taught in the morning. There should be short interval after some periods.

2. **Teacher-pupil relations:** Healthy teacher-pupil relations are helpful in effective learning as they increase motivation and mental competition among the pupils.

3. **Competition:** Healthy competition is conducive to effective learning. The inter-class or interhouse competitions will stimulate the pupils to work more in order to outshine others. Group competition should be strengthened. Jealousy should be avoided.

4. **Democratic organisation:** Democratic organisation based on love, affection, co-operation, mutual respect, sincerity and friendship etc, promotes healthy environment for effective learning.

5. **Pupils' participation:** Active participation of the pupils accelerates effective learning. The pupils should not act as passive listeners.

6. **Success, praise and blame:** Nothing succeeds like success. Praise stimulates pupils to work. Elder students are more sensitive towards reproof and blame than younger students.

7. **Rewards:** Rewards are helpful in learning. There are two types of rewards:

(a) Material rewards like books, reading and writing material and other valuable things etc.

(b) Social rewards like praise, degree, badge, certificate of honour and promotion etc.

8. **Punishments:** Punishments, arousing fear in anticipation, may influence the pupils to work and learn. They often act as a deterrent and serve as a form of discipline. Only judicious use of punishment should be made.

9. **Guidance:** Guidance in the selection of subjects and activities in accordance with age, ability, aptitude and other potentialities of the pupils should be provided as it is helpful in effective learning.

10. Relationships: Relationships with teachers, parents and peers affect learning

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(6) Miscellaneous environmental factors:

Learning is influenced by: (1) Natural surroundings, (2) Social surroundings, (3) Cultural surroundings, (4) Home environment, (5) Class-room environment, (6) School environment, (7) Religious environment, (8) Political environment.

THEORIES OF LEARNING AND THEIR EDUCATIONAL IMPLICATIONS

TRIAL AND ERROR THEORY OF LEARNING (CONNECTIONISM)

This theory is also known as (1) Pleasure-Plain Theory, (2) Stimulus Response Theory and Bond Theory of Learning. This theory was expounded by American psychologist Thorndike in 1898. He conducted many experiments on cats, dogs and fish and concluded that we learn each and everything by making mistakes and errors. When we begin to learn anything there may be many errors. But as the number of trials goes on increasing, the errors go on decreasing. Thus we learn from mistakes or experience. Trial and error learning consists in trying, failing, varying the procedure and gradually attaining success in a series of trials, without the learner seeing clearly

what the conditions of success are. This method is just like finding the appropriate key for a lock out of a bunch in the dark. If we merely try one key after another without examining them at all, until we find the right key, we are using the trial and error method.

Features or Essentials of Trial and Error Learning:

- i. **Motivation:** Motivation plays an important role in all types of learning. No trial and error learning can take place without motivation. Motivation may appear in the form of need, desire, purpose or goal. Trial and error learning like any other type of learning is oriented to goal.
- ii. **Block or barrier:** There should be some block or barrier. If there is no blockage, there is no need of trial and error. Efforts must be made to remove the block.
- iii. **Random responses:** Random responses are made in trial and error learning. By random responses, we mean the meaningless actions which do not solve the problem. But these responses are helpful to us as they help in knowing that such and such activities are not to be repeated.
- iv. **Elimination of wrong responses:** There is progressive elimination of the superfluous, unsuccessful or wrong form of activity or responses.
- v. Chance success: As a result of random movements, success comes by chance.
- vi. **Establishment of right responses:** In trial and error learning, there is integration and establishment of right responses by which goal is achieved. It is a stage of errorless performance.
- vii. Achieving the goal: Achievement of goal or attaining some sort of satisfaction is a last step in trial and error learning. Achievement of goal or attaining satisfaction is vely important for learning anything.

In the words of **Cole** if we see the facts according to Thorndike, we can break up the learning into six facts:

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- (i) **Drive:** There should be strong drive or motive otherwise the learner will not work so enthusiastically.
- (ii) **Block:** There should be some block or barrier. If there is no blockage, there is no need of trial and error learning. Efforts must be done to remove the block.
- (iii)Random movements are made to reach the goal.
- (iv) Chance success: As a result of random movements, success comes by chance.
- (v) **Selection:** Random responses do not remain for long time because the learner selects the right responses after certain trials. (vi) Fixation: Here right responses are fixed. It is a stage of errorless performance.

Experiments:

1. **Puzzle Box Cat experiment by Thorndike:** E.L. Thomdike studied the character of trial and error learning in a number of experiments on cats. He put a cat in the puzzle box with iron bars on the sides. On the floor of the box, was fixed a wooden slat which when pressed opened the door. A cat was placed inside the box and food was placed outside the box. The cat was kept hungry for 24 hours. The door of the puzzle box was closed. The cat could get food only if she

learnt to press the slat which opened the door. The cat made several unsuccessful attempts of biting the iron bars, striking head against these, and finally it was successful in opening the door by pressing the slat. The same experiment was repeated several times and it was found that the cat in each successive attempt took less time in pressing the slat and opening the door.

- 2. **Dog experiment by Loyd Morgan:** The dog was put into an iron cage, with a door not clearly visible. The dog made a number of attempts before he could open the door.
- 3. **Rat experiment by McDougall:** The rats were similarly confined in a small box with secret passage. After committing mistakes for 165 times, they succeded in finding out the correct passage.

Educational Implications of Trial and Error Theory of Learning:

- 1. **Importance of readiness:** Thorndike believes that readiness is preparation for action. It is essential for learning. If the pupil is ready to learn, he learns more quickly and effectively and with greater satisfaction than if he is not ready to learn. He warns usnot to make the child learn till he is ready to learn and allow not to miss any opportunity of providing learning if the pupil is already prepared to learn.
- 2. **Importance of motivation:** Thorndike emphasised the importance of motivation in learning which was totally neglected before his time. Arousal of motivation makes the students ready for learning. Students must be properly motivated before they are taught.
- 3. **Importance of experience:** The theory recognises the importance of previous experiences. Understanding grows due to previous experiences. The best way to develop understanding is to develop a body of connections appropriate to that of understanding.
- 4. **Strengthening of bonds:** An important task of the teacher is to see what theories, principles and generalisations, etc. he likes to be remembered or forgotten by the students. Consequently, he must try to strengthen the bonds or connections between the stimuli and the responses which are to be remembered. This could be done through drill, repetition, practice and reward. For forgetting, he should make attempts to weaken the connections through disuse and annoying students.
- 5. **Importance of repetition:** For effective learning, more repetitions should be made. Students should follow the rule that "practice makes a man perfect". Forgetting takes place because of the law of disuse.
- 6. **Role of reward and punishment:** The theory (law of effect) recognises the role of rewards and punishments in learning. Getting reward as a result of some learning motivates and encourages the child to proceed on the same path with more intensity and enthusiasm while the punishment of any type discourages him and creates distaste and disattraction towards that learning.
- 7. **Grading of the task:** Theory contributes the grading of the task from simple to complex. So teacher should proceed from simple to complex, known to unknown, concrete to abstract.

- 8. **Use of experiments:** Thorndike placed much emphasis on experimental verification. So the teacher should make use of experiments and learning by doing wherever possible for better and effective learning.
- 9. Learnings of skills: Various skills like sitting, standing, walking, running, cycling are learnt by trial and error.
- 10. **Scientific inventions:** Many scientific inventions, machines and improvements are the results of trial and error.
- 11. Formation of habits and sentiments: Habit formation is based on trial and error. Teachers and parents can form good habits and sentiments in the students on the basis of trial and error.
- 12. Use in insightful learning: Even in insightful learning, trial and error is involved.
- 13. **Transfer of learning:** Transfer in learning takes place because of identical elements in the two situations.

Limitations of Trial and Error Theory:

- **1. Energy consuming:** The theory requires a good deal of energy because transfer of learning is minimum under trial and error.
- 2. Random efforts: It is not desirable to do random efforts because doing anything without insight is meaningless. The theory ignores the role of understanding, experience, discrimination and insight in learning.
- 3. Emphasis on rote learning: The theory over-emphasises the role of rote learning
- 4. Not much useful for bright students: The theory may be useful for less intelligent and backward students but not much useful for bright and intelligent students.
- 5. Not much useful for higher classes: The theory is useful in case of students of Lower classes, but for students of higher classes, the theory does not provide much guidance.

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CLASSICAL CONDITIONING THEORY OF LEARNING

Classical conditioning theory was put forward by Russian psychologist, Ivan Pavlov (1849-1936). There are various names of this theory: (1) Pavlovian Conditioning Theory, (2) Conditioned Reflex Theory, (3) Conditioned Response Theory, (4) Substitution of Response Theory, (5) Respondent Conditioning (6) S-type Conditioning (7) S-R Associationistic Theory.

This theory was put forward by Pavlov and Watson. According to this theory learning takes place by conditioning. Conditioning implies the attachment or association of original response with the new artificial stimuli. In other words conditioning means modification of innate or natural response.

Experiments on Conditioning:

1. **Pavlov's Experiment on Dog:** Pavlov conducted an experiment on the dog. He used to ring the bell before giving food to the dog. He repeated this activity for several days under the similar

conditions. When the food was placed before the dog and the bell was rung, the saliva would secrete in the mouth of the dog. After some days, it was observed that only the bell was rung, the food was not placed, but the saliva started secreting. It means that natural response saliva was obtained by artificial stimulus (bell) instead of giving food. Pavlov named it as the theory of conditioning, theory of learning by Conditioned Reflex/Conditioned Response.

Illustration: A mother goes to the doctor's clinic for the treatment of his child who is suffering from high fever. After a thorough check of the child, the doctor advises the mother to get him injected. During injection, as the child feels the prick of the needle, he starts crying due to pain. The doctor advises the mother to come next day for another check-up of the day. This time also doctor injects the child and again the child cries due to pain. This process is repeated for a few days more. A day comes when the child starts crying merely at the sight of the doctor or at the sight of clinic or even one day the use of word 'doctor' at home may be sufficient to make the child cry. Thus the response of fear towards doctor develops in the baby.

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Factors influencing Conditioning (Conditioned Reflex or Response):

1. **Motivation:** Conditioning (Conditioned reflex or response) is highly influenced by motivation. If the subject is motivated for conditioning, he will be conditioned easily. All learning is motivated learning. Hence motivation is essential for all types of learning. In Pavlov's experiment of dog, food is motivation for the dog. If the dog is not kept hungry, he will not bother for the bell and even much for the food. Hence the individual should be properly motivated for learning.

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- 2. **Repetition:** If there are more repetitions of the conditioning process, there will be better conditioning. In Pavlov's experiment, the bell is rung again and again before giving food to the dog so that he may understand the necessary relationship between the bell and the food. If the bell is rung only once then the dog may not understand the relationship between the bell and the food. Moreover, the process of ringing the bell and giving food to the dog was repeated several time.
- 3. **Immediacy:** Conditioning is influenced by immediacy. In the words of Prof. Murphy, "Immediacy is necessary between the natural and artificial stimulus." In Pavlov's experiment the food is the natural stimulus and the bell is artificial stimulus. Food is given immediately after ringing the bell. If the time interval between the bell and the food is too much then the dog may not understand the relationship between the bell and food. Hence there may be no conditioning. Hence if artificial and natural stimuli is not given simultaneously, the conditioning may not take place.
- 4. **Age:** Children may be conditioned easily than adults.
- 5. **Mental health and intelligence:** Good mental health and high level of intelligence help in conditioned response or conditioning.
- 6. **External barriers:** Conditioning or the conditioned response will be delayed if there are external barriers (e.g., noise).

7. **Extinction:** Just as repetition of the pairing of the conditioned stimuli and the unconditioned stimuli strengthens the connections, similarly the presentation of the conditioned stimulus without its being followed by the unconditioned stimulus results in progressive diminution of the response. The dog no longer salivates at the sound of bell after the bell has been rung a certain number of times without being followed by food. Deconditioning (Extinction of Conditioned Reflex or Response):

Educational Implications of Classical Conditioning Theory:

- 1. Language learning and concept formation: Language can be learnt with the help of conditioning. Concept formation, during the early childhood period takes place as a result of conditioning. The techniques of using dolls, balls, cubes, pictures posters, flash cards, etc., for language learning and concept formation are based on conditioning A picture of an elephant or a camel is presented before the learner and the teacher speaks out the word. But the child comes to recognise birds, animals, vegetables and fruits by their names on the basis of concept formation and learning.
- 2. Theory of reward and punishment: Theory of reward and punishment is based on conditioning i.e., bad deed should be associated with punishment and good one with relevant reward or praise. Rewards strengthen the behaviour and punishment weakens the behaviour. The desired behaviours of the learners should always be associated with the rewards and their undesired behaviour should be associated with the punishment. Moreover, reward or punishment, should be given at the right time i.e., immediately after the desired or undesired behaviour.
- 3. Formation of attitudes and sentiments: Positive attitudes, sentiments, values and beliefs can be formed and developed with the help of conditioning. Most of the conditioning takes place in social environment. Therefore, parents and teachers should create healthy and favourable situations so that the children may develop positive and favourable attitudes and sentiments towards them and society.
- 4. **Formation of good habits:** Good habits can be formed with the help of conditioning. Habits of industriousness, punctuality, obedience, co-operation, sincerity, respect for elders and self-discipline etc. can be developed among children by using the procedure of conditioning.
- 5. Elimination of negative attitudes and bad habits: Unhealthy attitudes and bad habits like drinking, smoking, gambling can be broken with the help of 'Deconditioning'.
- 6. **Superstitions and phobias:** Superstitions and phobias can be deconditioned. For example, a child has developed superstition that by conditioning that when he sees a cat crossing the street, he gets punishment. Such superstitions can be removed through further conditioning (deconditioning). Let the child get no punishment on a number of times when a cat is made to cross his path. Thus superstitions, fears, phobias, anxiety, nervousness among children can be removed or minimised with the help of deconditioning

- 7. Liking and disliking for teacher and subject: An individual may like or dislike an object or a person, if it is associated with good or bad effects. A teacher with unpsychological method of teaching or authoritative (harsh) behaviour may be disliked by the students. Students may develop a feeling of hatred towards the teacher as well as the subject due to conditioning. On the other hand, a teacher with effective and psychological methods of teaching and affectionate and friendly behaviour may be liked by the student. The students will develop a feeling of love, affection and liking towards the teacher.
- 8. **Principles of association:** Laws of association (contiguity or nearness, similarity and contrast, etc.) get practical application in the process of conditioning.
- 9. **Repetition (practice):** Repetition helps in conditioning. Had the food not been repeated no learning would have taken place. Learning of physical sciences, biological sciences, social sciences, mathematics, language and skills need repetition or practice. Therefore, students must be given ample opportunities to revise and repeat their lessons.
- 10. Use of audio-visual aids: Conditioning emphasises the use of audio-visual aids in the teaching-learning process. The use of audio-visual aids can be made effective through conditioning. For example, if a word 'crow' is to be taught to the children in the class, then the picture of the 'crow' must be shown to them along with the word written on the blackboard. Children will speak that word after looking the picture. Then the picture is removed and the children will repeat only the written word. Thus the children could learn to speak the word 'crow' as a result of conditioning.
- 11. **Treatment of delinquent, problem and maladjusted children:** The theory also helps in the treatment of delinquent, problem and many other types of maladjusted children. This theory helps the teachers and psychologists to study the conditioned response of fear, phobia, anxiety or emotionally unstable children. Thus, the teacher can prepare a case and understand the morbid actions of the child.
- 12. Useful in mental hospitals: The mental cases and emotionally unstable children can best be treated with the process of conditioning. Conditioning plays an important role in the treatment of mental patients. Moos Ward Atmosphere Scale is pioneer in this regard. It states that on account of love, affection and good treatment many complexes and fears can be removed from the minds of such patients and such type of conditioning helps in their early recovery.
- 13. Useful in adjustment: Conditioning method is very useful for helping the children in making adjustment with the environment. The beginning of this takes place with the adjustment of the child in classroom conditions and school circumstances. Later on, he applies all this to make adjustment in real life challenging situations. It is the conditioning only that enables the child to make way in difficult and odd circumstances.

14. **Progress of culture and civilisation:** This theory is very useful for the progress of culture and civilisation. With the help of this theory, the child is able to learn many things in his early age.

