

BEHAVIOURISM

“Behaviourism is primarily concerned with observable and measurable aspect of human behaviour.”

INTRODUCTION

J.B. Watson (1879-1958) from whose classic experiments, an entirely new doctrine, namely behaviourism emerged and influenced educational system for many decades, rejected the very idea of consciousness and introspection as both are mentalistic and cannot be proved by scientific test. According to him the whole idea of consciousness is absurd. His behaviourism discarded not only the concept of consciousness, but also all mentalistic notions like soul, mind, mental life, images and ideas etc. Thus behaviourism as propounded by Watson totally concentrates on the observable and measurable behaviour of organism.

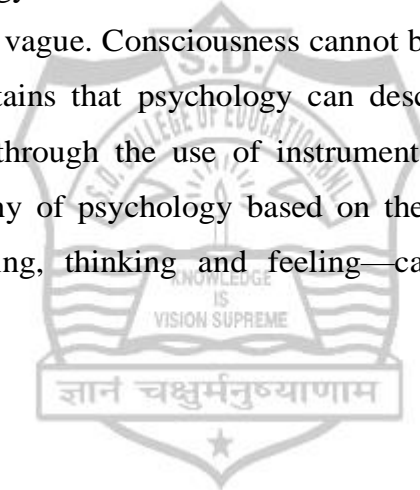
EMERGENCE OF BEHAVIOURISM

Earlier it was considered that psychology is the science of soul as etymologically, the word ‘psychology’ means the study of soul. What is soul? How can it be studied? The inability to find clear answer to such questions led some ancient Greek philosopher to define psychology as the “study of the mind”. Although the word mind was less mysterious and vague than soul, but it also faced the same questions, namely: What is mind? How can it be studied? Consequently this definition was also rejected. The failure to define the terms soul and mind persuaded the philosophers and psychologist to search for some other suitable definitions. William James in his book ‘Principles of Psychology’ published in 1890 defined psychology as the “description and explanation of state of consciousness as such.” **Withhelm Wundt (1832-1920)** who established the first psychology laboratory at the university of Leipzig in Germany and his disciple Edward Bradford, Titchener also defined psychology as the science of consciousness. Consciousness is studied in terms of feelings, emotions and sensations which cannot be measured but studied with the help of ‘introspection’— the process of looking within. The definition was also rejected as the introspection method for the study of the conscious activities of the mind was an unscientific method. From the 19th century onwards, with the advent of the modern era of scientific investigation psychology began to be defined in terms of the study of behaviour. William McDougall, British

psychologist, was the first to define psychology as the science of behaviour. In 1913, J.B. Watson, the father of the behaviourist school, elaborated the concepts of the term behaviour including in it both human and animal behavior and defined psychology as “the science of behaviour”.

CONCEPT OF BEHAVIOURISM

Behaviourism is a school/system of psychology propounded by J.B. Watson (1878-1958). As the name implies, behaviourism, studies behaviour of an organism. It is not concerned with structure or function of the mind, but with behaviours as it is observed. It rejects the notion that the proper subject of psychology is the contents of consciousness. Watson concluded that the whole idea of consciousness is vague. Consciousness cannot be seen, touched or exhibited in a test tube. Behaviourism maintains that psychology can describe and measure only what is observable either directly or through the use of instruments. It is also called the learning perspective and is a philosophy of psychology based on the proposition that all things that organisms do—including acting, thinking and feeling—can and should be regarded as behaviour.

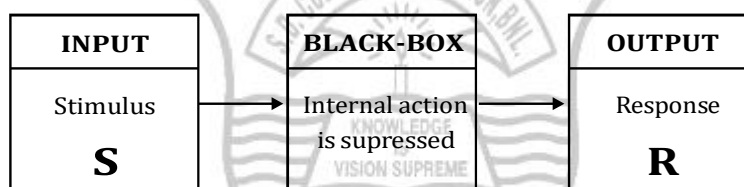


There are two types of behaviour:

Overt behaviour: It includes any acts or actions that can be directly observed and measured. E.g. walking, facial expression and hand expression etc.

Covert behaviour: It refers to performance that cannot be observed directly. This is internal processes that are not observable by others. E.g. thinking, imaging, feeling, attitudes and beliefs etc.

Watson's Behaviourism is a method of studying behaviour focused its attention totally on the overt or observable behaviour. For this purpose, it tried to reduce all of man's activities, including his thinking, feeling and volition to the level of that behaviour which could be observed and objectively recorded. Thus a behaviourist is not interested in the feeling of fear (because it is not measurable) but pays attention to the changes in heart rate and blood pressure, which are the effects of fear and can be objectively measured.



Definitions

According to *Charles Stangor*, "Behaviourism is a school of psychology that is based on the premise that it is not possible to objectively study the mind, and therefore that psychologists should limit their attention to the study of behaviour itself."

According to *Charles Stangor*, "Behaviourists believe that human mind is a 'black box' into which stimuli are sent and from which response are received. They argue that there is no point in trying to determine what happens in the box because we can successfully predict behaviour without knowing what happens inside the mind."

According to *Dictionary.com*, “Behaviourism is the theory or doctrine that human or animal psychology can be accurately studied only through the examination and analysis of objectively observable and quantifiable behavioural events, in contrast with subjective mental. “Behaviourism is a school of psychology that takes the objective of evidence of behaviour (as measured responses to stimuli) as the only concern of its researches and the only basis of its theory without reference to conscious experience.”

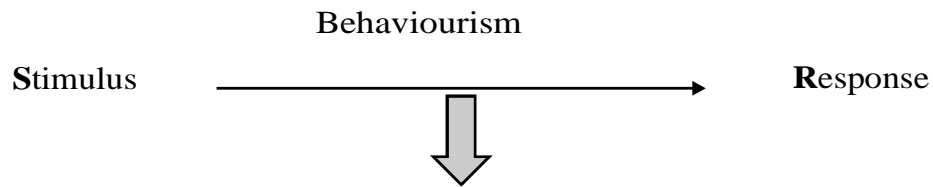
“Behaviourism is a theory of learning focusing on observable behaviour and discounting mental activity. Learning is defined simply as the acquisition of new behaviour.”

“Behaviourism is a school of psychology that confines itself to the study of observable and quantifiable aspect of behaviour and excludes subjective phenomena, such as emotions or motives.”

“Behaviourism is a theory of learning based upon the idea that all behaviours are acquired through conditioning. Conditioning occurs through interaction with the environment.”

Connection of Stimulus and Response

Watson held a strong conviction that behaviour can be explained in terms of stimulus—response (S—R) connection. He published his book ‘Psychology as the Behaviourist Views It’ (1913) in which he developed a simple theory of learning proposing that when stimulus and response occur at the same time in close contiguity, the connection between them is strengthened.



Behaviourists aren't interested in what happens in between S and R. They don't think you need to know.

Conditioning and Deconditioning

Watson made conditioning the basis for learning. For him, learning is shifting of old response to stimuli and forming a bond between stimulus and response in the brain. He emphasized that all human behaviour is learned by interacting with external environmental stimuli. He viewed that conditioning has a very wide range of applicability in educational setup. Reactions of pleasure and pain can be easily associated with previously experienced neutral stimuli. Deconditioning can be applied to counteract or wane the effect of previous learning. It can be helpful in case of elementary or weakening the inappropriate learning such as formulation of bad habits.

Dominance of Environment over Heredity

Behaviourism is the educational theory that is based on the underlying ideology that the environment has a direct influence on behaviour. It presumes that by manipulating the environment, learning can be enhanced through behaviour modification. Environment plays dominant role. Thus the behaviour of an individual supposed to be controlled by the environmental forces and not by heredity endowments.

Nature Vs Nurture or Heredity Vs Environment

Nurture or Environment is more important. Watson said, "I can make the child as you like."

The 'Big Four' of Behaviourism (Exponents)

- John Watson

- Edward Thorndike
- Ivan Pavlov
- B.F. Skinner

Key Points of Behaviourism

1. Behaviourism came as a reaction against the method of introspection or subjective concept like mind, soul and consciousness.
2. It arose in an attempt to make psychology a science, which is more objective.
3. It assumes psychology is the science of human and animal behaviour.
4. Overt behaviour is the main field of psychology. Behaviourist claimed that it is the observable behaviour that indicates whether or not the learner has learnt something, and not what is going on in the mind of learner.
5. The role of environment carries alone to mould and develop the personality.
6. The chief method of learning is conditioning. Behaviourism rejects introspection as the method of studying behaviour.
7. Conditioned responses are building blocks of behaviour. In simple words, a conditioned response is a simple learned response to a stimulus. Contiguous frequency of presence of a stimulus and a response, makes that response conditioned to that stimulus.
8. The purpose of psychology is to predict response and to control the behaviour of human beings and animals.

BASIC ASSUMPTIONS

Behaviouristic approach depends heavily upon learning theories which include S-R reinforcement theories and social learning theories. Learning theories are based on individual behaviour, which is mostly considered to be acquired through learning. This approach tries to explain human behaviour by using principles of learning. The basic assumptions of this approach are as follows:

Man is a reactive, responsive organism: His behaviour can be shaped and moulded by the associations and rewards he experiences. To say, man's behaviour is the function of his learned experiences.

Man is mechanistic: Man is viewed as a machine, set in motion by input (i.e. stimulus) and producing output (i.e. response). There is little concern for analyzing the machine's structure, the human body, or changing the hardware, the mind itself.

Man is deterministic: Everything of individual's behaviour-including his values, attitudes, and even emotional responses – is considered to be determined by his past or present environment. Concepts like blame, respect and dignity are irrelevant to behaviouristic approach. As man is determined by his past or present learning experiences, he deserves neither credit nor blame for whatever he does (B.F. Skinner (1971): Beyond Freedom and Dignity).

Objectivity is the key of studying and interpreting individual's behaviour: Verbal expression of individual's behaviour or his self-report (introspection) has no significance as these cannot be objectively verified or scientifically tested.

Reinforcement can make, sustain or extinguish any response or behaviour. It is the rock foundation of building behaviour of an individual. Reinforcement strengthens the learned response and can increase or decrease the probability of its occurrence in the subsequent situations.

Environment has the strongest effect to initiate or control individual's behaviour more than his hereditary endowments. Stimulus-response automatization and environment influences can mould any child's personality the way one desires.

Scientific study of the behaviour is the only way

to make an objective, authentic analysis of individual's behaviour, and that can be done only by the use of experimental method. What is not observable and cannot be studied scientifically cannot be considered a behaviour. Therefore, there is no place for mental imagery, feelings, values and attitudes because they cannot be directly observed.

Principles of learning determine the type of individual's behaviour: Abnormal behaviour is also a learned behaviour. Such people have failed to acquire appropriate responses to the stimuli or have not got opportunities to have appropriate stimulus conditions for learning.

Once learned behaviour/response is not completely extinguished: Even after a sufficient lapse of time presentation of adequately strong stimulus can revive that learned response.

BEHAVIOURISM: IN RELATION TO LEARNER, TEACHER AND TEACHING-LEARNING PROCESS

Behaviourism as a school of psychology had a strong hold in psychology for a number of years and influenced many contemporary psychologists to conduct research on the concepts advanced by Watson. The scholars like Lashley, Tolman, Hull and Skinner etc. tried to modify and refine the behaviouristic approach to increase its suitability and usefulness. Its learning theories and propagated principles have a domineering role in influencing educational system in America and abroad. Skinner's operant conditioning which is quite different from other types of conditioning, his concepts of reinforcement, motivation, teaching machines and techniques meant for the modification of behaviour have revolutionary effects on teaching-learning setup. The role of a learner and of a teacher in behaviouristic set up of instruction can be described as follows:

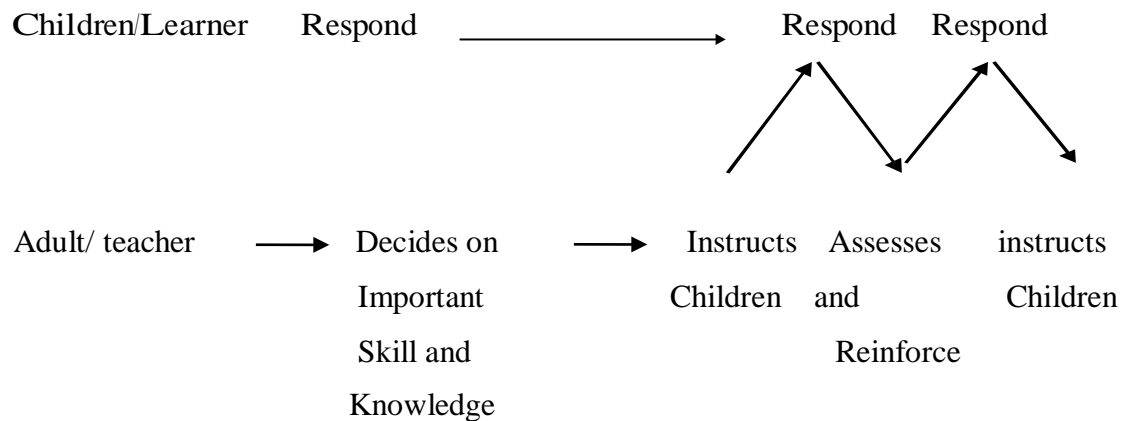


Fig.: A behaviouristic model of roles in the teaching-learning process

Role of Learner

The basic of shaping and modifying behaviour using principles of learning places learner in a somewhat passive role of receiving information in the already set situation where information is presented to him in the prescribed manner. His role relatively is of a receiver not of a initiator. There is little initiation on the part of the learner in the classroom. The instructional material is delivered by the teacher who plays a more dominating and authoritarian role.

The learner has to learn the subject-matter presented to him. The contents of the subject-matter, methods of teaching and other helpful tools and techniques are decided by the teacher. The learner is simply required to learn the material by forming certain associations between the different elements of contents presented to him.

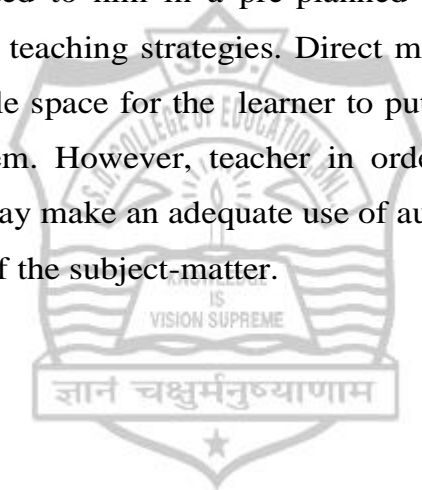
Mechanical learning of things on the part of a learner is relatively more emphasized. Understanding of contents by heart is considered good when the learner becomes capable of retaining the contents for a longer time and can reproduce them in the desired manner when asked for. Rote learning is preferred to volitional learning, especially in case of young children.

Learner needs a lot of practice: In order to enhance the efficiency of his learning, the learner has to learn the subject-matter which is very frequently presented to him and is broken into small segments with which he has to do a lot of practice to come upto a certain level of efficiency.

Learner is desired to form a habit of doing certain activities in some specifically designated manner so that in subsequent similar conditions, the performance of these activities may become convenient for the learner. For achieving this goal, his correct responses are strengthened by reinforcement. This is the type of extrinsic motivation which impels the learner to show better performance.

Learner learns by forming some chain of connections: In behaviouristic educational set-up the learner learns the contents by forming a chain of connections between the element of contents presented to him. He learns through forming verbal chain e.g. boy-girl, father-mother, horse-buggy, etc. or by chaining i.e. to do a number of motor activities in a connected way to reach the goal, such as the process of unlocking the door with the help of a bunch of keys.

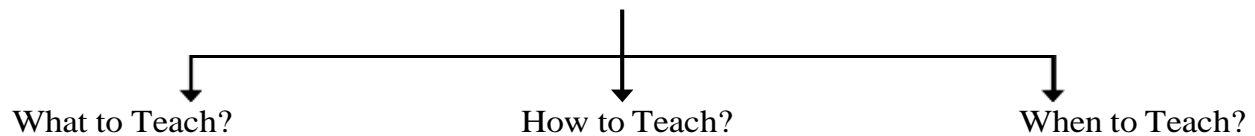
Learner is desired to learn contents which are highly structured and are already well-organized, which are presented to him in a pre-planned manner with a little scope of changing the already decided teaching strategies. Direct methods of teaching are used in this approach, which give little space for the learner to put matter for open discussion to get the insight of the problem. However, teacher in order to make the subject-matter interesting and pleasurable, may make an adequate use of audio-visual aids so that learners may get a good assimilation of the subject-matter.



Role of Teacher

Teacher of behaviourism plays a very dominant role. He is sole, important actor to do everything in the class. It is he who decides about the methodology for the presentation of the subject material in front of the learner.

Role of the Teacher in Class



Teacher should plan about the presentation of subject matter: The subject matter in this approach should be highly structured, well organized and its presentation is planned by the teacher — what to teach? When to teach? and How to teach? — is totally decided by the teacher. Teacher should carefully attend to the quality of presented material and its way of presentation.

Teacher should use of various forms of reinforcement: Reinforcement helps the learner in acquisition of new facts or information, its consolidation and retaining; and complete revival when the need of its retrieval arises.

Use of Reinforcement and Punishment: Teacher should use reinforcement to induce the learners for the acquisition of desirable habits and punishment in breaking up undesirable habits.

Provide best possible learning situations and environment: Behavioural highlighted the role of environment in shaping and modifying the behaviour of learner. Teacher should environment for harmonious growth and development of the learner.

Provide motivation: Motivation is the key concept of behaviouristic approach in an educational setup.

A teacher should use various means to make the students mentally ready to learn the subject matter and he should try to make learning pleasurable experience so that students drive to learn can be sustained. For this he should administer the various types of rewards.

Use of principles of learning: Teacher should use principles of learning both for learning and unlearning of some specific response pattern. Learning principles like contiguity, frequency, recency, drills and reinforcement and used to form bondages of adequate learning (conditioning), likewise the teacher can use these principles for relinquishing the undesirable behaviour patterns (deconditioning) such as elimination of bad habits. Most of the fears and phobias of the learners can be removed through deconditioning; which may lead the child to his better adjustment.

Use of individualized instruction strategies and/ or self-instructional programmes: Teacher should adopt individualized instruction strategies and/or self-instructional programmes to address the individual needs of the students. He should present the subject matter to a slow learner or a student having some learning difficulty, a bit-by bit and increase that a step-by-step according to learner's speed and capacity, and feedback provided by him.

In short, teacher is a prominent figure in teaching-learning process. He presents learning material, devises and selects proper methods of instruction, and tests the feedback. He controls the whole show of teaching and learning.

Teaching-Learning Process

Teacher-Centred Process: The whole teaching-learning process in the behaviouristic approach in education is greatly influenced by the domination of the

teacher. It is said to be a teacher-centred process. The students do not get adequate freedom and autonomy in the teaching-learning process. His interference in every aspect of instruction makes the teaching-learning process mere mechanical and monotonous.

Logical and Systematic Presentation of Subject Matter: The teaching-learning contents are presented in a systematic sequence taking in view the level of growth of the learners so that they should not only learn the information presented to them but also assimilate and internalize the learned material. *Morrison* views that in order to achieve this goal it is essential that the material should be presented in a planned manner.

No Flexibility: As behaviouristic approach contends the use of principles of learning in teaching-learning process to achieve commendable results of teaching, no laxity in the paradigm strategy once decided is allowed. It is viewed that previously decided fixed strategy of presenting the stimuli (information) can only help the students to master the desired responses.

Lack of Intrinsic Motivation: While learning specific subject-matter learner's concentration is more on emitting an appropriate response rather than to master learning skills. Therefore, the motivation is largely extrinsic and thus naturally the involvement of the learner in learning contents cannot be expected to be up to the mark.

Less Emphasis on the Development of Higher Mental Abilities: A teacher is always concerned to make teaching all the more effective and for achieving this end, he uses appropriate methods and techniques in presenting the subject-matter. He tries that students should master the contents properly and be able to reproduce these in an absolute perfect manner.

Process

This is considered the sole criterion of judgement of utility or success of instruction. Therefore, the development of higher cognitive abilities like creativity, divergent thinking, innovation and problem-solving, etc. are not emphasized.

No Effective Classroom Interaction: Effective classroom interaction between teacher and learners is generally lacking. The teacher seems to be overly busy in making his teaching effective by delivering the contents of syllabi and emphasizing the induction of that information in the students. Students are also busy, on their part, to learn and memorize the contents of the subject-matter in a perfect manner. Students are less actively involved in the classroom interactional process to discuss the matter or to arise questions about certain things or giving answers about them.

Effective Learning: Subject-centredness and teacher's domineering role in teaching-learning process result in effective learning on the part of the students. Systematic presentation of the subject-matter, use of proper methods of teaching and helping devices help students to learn the contents appropriately and to assimilate them in their existing storehouse of knowledge.

Performance and Achievement: The systematization of contents of instructional material, use of appropriate methods and techniques for delivering information, teacher's role in teaching-learning process and his involvement and intentions in delivering good material to students, methods of evaluation and techniques used for reinforcing students' successful attempts - all provide opportunity for the learners to benefit maximally from instruction and exhibit appreciably good performance and achievement to meet the objectives of teaching and learning.

Effective Classroom Discipline: Students remain busy in mastering various concepts and information provided to them through various means. They remain busy in practicing with the contents, learning discriminating between things and making generalizations. At higher instructional level they are also expected to make use of these generalized principles in further learning situations. The teacher always takes care to prepare students mentally ready to accept and learn new contents of syllabi. Students are always busy in doing one or the other thing. So, the problems of classroom discipline, in general, do not arise, but such a perfectly, calm atmosphere lacks dynamism, because of less active participation of students in teaching-learning process.

CONCLUSION

Thus, behaviourism as an approach in education highlights the importance of reinforcement in learning, adopting and continuing of desirable behaviour and relinquishing of the undesirable. It defines the aims and objectives of learning in specific terms and means to achieve these objectives. This approach specifies the conditions and ways how children's behaviour can be shaped and moulded to achieve the ultimate goals. It emphasizes the environmental effects on individual's behaviour and development and seeks appropriate means to study these effects. The approach to deal with mentally disordered individuals as well as slow learners, backward children, problem children and even delinquents, has been drastically changed on account of the experimental studies conducted by behaviourists. Specifically "learning by successive approximation", 'token economies' and other techniques of behaviour modification have changed the scenario of classroom teaching-learning, clinical diagnosis and the therapeutic techniques used for the treatment of mentally disordered individuals. Undoubtedly, the introduction of new instructional

Process

techniques such as individualized instructional programmes including programmed learning and self-instructional (computer-assisted) programmes is an innovative contribution of behaviourism to the field of education.

