

## THE BEHAVIOURIST APPROACH TO THE UNDERSTANDING OF HUMAN BEHAVIOUR

Behaviourism is the theory that human behaviour is determined by conditioning (a change in behaviour due to association between events) rather than by the mind and emotions. John Broadus Watson, a US psychologist, founded behaviourism but it originated with Ivan Petrovich Pavlov's (a Russian experimental physiologist) research into salivation reflexes in dogs, during which he identified the principles of classical conditioning or association learning.

Pavlov noticed that whenever dogs anticipated food they salivated and secreted other digestive juices. Using his knowledge that anticipation could not only be stimulated by the sight and smell of food but also by other associated stimuli such as the sounds of their keeper's approach, Pavlov conducted some experiments to show that learning is based on association.

On many occasions Pavlov rung a bell just before a dog is fed and the dog salivated as usual on receiving its food. Then the bell is rung without any food being presented and the dog salivated in response to the bell being rung. In Pavlov's terms, the food is a neutral stimulus, which means that it originally produces the response investigated; the salivation in response to the food is an unconditional response, this means that it's a natural reflex; the sound of the bell being rung is the conditional stimulus, which means that it is being used to produce the unconditional response; and finally the salivation in response to the bell ringing (without being followed by food) is the conditional response. This is known as the S-R relationship.

Pavlov also found out that it's a lot easier to form a conditional response if the unconditional stimulus (food) follows the conditional stimulus (bell ringing) and also if the conditional stimulus occurs very close in time to the unconditional stimulus. In addition to that Pavlov found out that the intensity of the stimuli was also very important as a dog salivates more if trained on larger pieces of food and in response to a louder bell.

This learning process is known as classical conditioning but it is also sometimes referred to as Pavlovian (after Pavlov) or respondent conditioning. This research should be relevant to those studying communication and media. This is because we often want a permanent change in someone's behaviour as a result of communicating. For example, advertisers want to change people's purchasing behaviour as a response to their advertising and politicians hope to change people's voting behaviour through their political broadcasts.

However, this response only remains if the two stimuli are presented, because if you stop the food but keep ringing the bell, the dog will eventually stop responding to it. Therefore the response will be extinguished.

Using Pavlov's findings on classical conditioning a US psychologist John Broadus Watson (founder of behaviourism) applied classical conditioning to humans and he is credited for recognising classical conditioning as an explanation for how mental disorder develops.

Watson conducted an experiment to classically condition a fear response to an eleven-month-old child called Albert. Albert had a white rat and every time he went to touch it, Watson would strike a steel bar, this frightened Albert and made him cry and the fear of the sound was then transferred to the rat. After seven stimulations Albert was not only afraid of white rats but he had also developed a fear to white rabbits, cotton wool, a fur coat, the experimenter's white hair and also Father Christmas. The original plan was to carry out the experiment on Albert and then remove the conditioned response before it became consistent, however this was never carried out. Using the results of this experiment Watson explained that

an unreasonable fear of an object or situation (a phobia) could be acquired through classical conditioning. Therefore, if a person has arachnophobia (a fear of spiders) then he or she might have had a bad experience with them in the past.

Edward Lee Thorndike, an American psychologist and educator, extended Watson's work to develop his law of effect. At the same time that Pavlov was researching classical conditioning, Thorndike invented the puzzle-box to investigate how animals such as cats and dogs solve certain problems. He noticed that animals often repeated certain movements if they were successful or were linked with pleasurable consequences, as it leads them to a quick solution, therefore the quicker and better that movement is learned. Thorndike also studied learning in humans. He found out that like animals, being right (a positive result) helped students to maintain a correct response but being wrong didn't appear to eliminate mistakes.

A US psychologist known as Burrhus Frederic Skinner then took up Thorndike's findings. Skinner was not convinced that all behaviour was based on reflexes, he argued that all behaviour is under the control of 'reinforcement' (reward and punishment) in other words we behave the way we do because of the results created by our past behaviour. However unlike Watson, Skinner never denied that heredity and inner process (for example a person's feelings and the mind) had a role in explaining behaviour. Skinner's research led him to develop the operant conditioning. Operant conditioning is also known as instrumental conditioning and it causes operant behaviour, which is basically a controllable and voluntary behaviour.

Skinner invented the Skinner box where a rat or pigeon's learning behaviour could be monitored efficiently. Inside the box, a simple response from the rat or pigeon such as a peck or bar-press is rewarded with food or drink. Any event that strengthens or increases an organism's responding rate is known as a reinforcer. Rewarding the pigeon or rat with food and drink after its response is known as positive reinforcement because it increases the possibility of the behaviour occurring again. Negative reinforcement is the response of the organism to remove an unpleasant state, for example an electric shock is passed through the box and the rat or pigeon 'switches' it off by a peck or a bar-press. Negative reinforcement, however, is not punishment. Punishment is the cause of a decrease in behaviour after a certain response. For example, if a rat pushes a button in the Skinner box and an electric shock is sent through it, this will cause the rat to refrain from pushing that button in the future. To summarise operant conditioning, we say that:

**Positive reinforcement** – behaviour            pleasant event = increase in behaviour

**Negative reinforcement** – unpleasant event            behaviour that stops event = increase in behaviour

**Punishment** – behaviour            unpleasant event = decrease in behaviour

To put this into human concept, if a person has developed a fear of something, he or she will avoid that situation to reduce the fear. Using Skinner's terms, the avoidance is reinforcing behaviour as it decreases the fear factor and as avoidance is associated with the pleasant result of reducing fear, the behaviour is maintained through operant conditioning.

Skinner also developed the idea of shaping this means if you control the reinforcements, which are the response to behaviours, then you can shape behaviour. This is more commonly known as behaviour modification. Shaping is the way in which a complex response can be achieved by reinforcing simple responses that gradually build up to the desired complex behaviour.

Albert Bandura, a Canadian psychologist, selectively merged Sigmund Freud's ideas about identification with Skinner's thoughts on reinforcement and added his own ideas about the central role of observation and imitation in children's learning to develop the Social Learning Theory. Bandura was a social learning theorist and they believed that certain behaviours could be acquired just by watching others performing it and this is known as observational learning. Bandura agreed with Skinner's views on reinforcement but he also adds that we also learn by observing the consequences of other people's actions. Bandura explained that we copy the behaviours that bring rewards and avoid those that bring punishment for example we don't have to experience frostbite before we learn to wear gloves.

Bandura normally observed children who are presented with a 'model' who behaves in a particular manner and the extent to which they copy the model is then measured. His results have shown that children are more likely to imitate those who are similar to themselves, who are seen to be rewarded for their behaviour and those who have some kind of status (due to their possessions, strengths etc.). Bandura also recognised other factors that affected the extent to which the children imitated the models. These were if the encouragement is increased (i.e. offering a reward), then the children are more willing to copy the model and previous experience influences the attention paid to certain aspects of the model's behaviour. For example, those children who are used to violence are more likely to pay attention to violent aspects of the model's behaviour.

Observational learning is also referred to as vicarious learning or imitative learning. This is because we copy what others do if we decide from observation that their behaviour will be rewarding. Bandura was quite sure that this learning could also be done symbolically through language (communication). For example, this is one way how parents pass on their attitudes onto their children. Therefore, as a result of his observations, Bandura concluded that learning doesn't take place only through direct reinforcement.