

CLASSICAL CONDITIONING OF HUMAN BEHAVIOUR

INTRODUCTION

The theory of classical conditioning (also called Pavlovian conditioning) is accepted worldwide and has remained virtually unchanged since its conception of Pavlov's work. It is used to explain and interpret a wide range of human behaviour, such as where phobias come from, why we dislike certain foods, the source of our emotions, how advertising works, why we feel nervous before a job interview and before an exam and what arouses us sexually.

PAVLOV

Ivan Pavlov, the famous Russian physiologist, discovered these important relationships around the turn of the century. He created the first learning theory, which precedes the reinforcement theory. In his experiment with dogs, he discovered the process of reflex learning (Classical conditioning). That an unconditioned stimulus (food) which produces an unconditioned response (salivation) is presented together with a conditioned stimulus (bell), so that the salivation is eventually produced on the conditioned stimulus (bell) alone, thus becoming a conditioned response.

Stage 1 (Before learning)	Food (UCS) = Salivation (UCR) A bell does NOT produce salivation
Stage 2 (During learning)	Bell (CS) + Food (UCS) = Salivation (CR)
Stage 3 (After learning)	Bell (CS) = Salivation (CR)

UCS = Unconditioned Stimulus

UCR = Unconditioned Response

CS = Conditioned Stimulus

CR = Conditioned Response

The importance and application of Pavlov's work extends beyond salivating dogs. His theories of Classical conditioning explained a major portion of human behaviour and helped to launch psychology as a true science.

WATSON

The first attempt to apply Pavlov's findings to humans was made by Watson. He believed that all human behaviour was a product of learning and conditioning, he stated in his speech of 1913:

“Give me a dozen healthy infants, well-informed, and my own special world to bring them up in, and I'll guarantee to take any one at random and train him to become any type of specialist I might select – doctor, lawyer, artist, merchant-chief and, yes, beggar man and thief.” (Watson, 1913)

This was an extremely revolutionary view for its time. Many psychologists and public opinion were not ready to accept these new ideas (a similar response to Darwin's theories on evolution). Today, Watson is credited with recognizing its importance as a potential explanation of how many disorders develop.

So when Watson worked with Rayner (1920) and they succeeded in inducing fear in a young child through classical conditioning. The following experiment was considered to be one of the most ethically questionable psychology experiments ever conducted.

Key study: The case of little Albert (Watson and Rayner, 1920)

Albert B's mother was a wet nurse in a children's hospital. Albert was described as 'healthy from birth' and 'on the whole stolid and emotional'. When he was about nine months old his reactions to various stimuli were tested – a white rat, a rabbit, a dog, a monkey, masks with and without hair, cotton wool, burning newspapers and a hammer striking a four foot steel bar (just behind his head). Only the last of these elicited a fear response and so constituted the UCS (with fear the UCR); the other stimuli were neutral because they didn't produce fear.

When Albert was just over eleven months old, the rat and the UCS were presented together; this occurred seven times altogether over the next seven weeks, by which time the rat (CS) on its own came to produce the fear response (now a CR).

The CR transferred spontaneously to the rabbit, the dog, a sealskin fur coat, cotton wool, Watson's hair and a Santa Claus mask, but it did not generalize to Albert's building blocks or to the hair of two observers (i.e. Albert showed discrimination).

Five days after conditioning, the CR produced by the rat persisted; ten days after conditioning it was 'much less marked' but one month after conditioning it was still evident.

Whether Watson and Rayner had intended to remove the CR is not known – Albert's mother removed him from the hospital. (GROSS R, 1996, Psychology The science of mind and behaviour).

Watson and Rayner could have attempted to remove little Albert's fear by using the method of direct unconditioning employed by Jones (1924) to treat little Peter. Little Peter had a fear of animals, therefore an experiment was conducted in order that he become unconditioned to his fear, thus lose his phobia. The experiment was very effective, and this was an early example of a method of removing fears (or phobias) called systematic desensitisation; it is used a lot today.

EVERY DAY CLASSICAL CONDITIONING

This type of influence is extremely common. If you have pets and you feed them with canned food, what happens when you begin to open the can with an opener? The animals come running even if you are opening a tin of baked beans! They have associated the sound of the opener with their food.

Classical conditioning works with people too. Go to Tesco's and watch what happens when there is an announcement regarding a major sale (January Sales), running over a short period of time. Cost conscious consumers will make a beeline for the Sales area because they associate a good sale with the announcement. (Research also proves that people are more likely to buy the sale item under an announcement, even if the item isn't good value).

Classical Conditioning also works with advertising. For example, many beer advertisements prominently feature young women (not wearing a lot of clothing). The young women (Unconditioned Stimulus) naturally elicit a favourable, mildly arousing feeling (Unconditioned Response) in most men. The beer is simply associated with this effect. The same thing applies with the catchy phrases and music that accompany many advertisements.

A strong application of Classical Conditioning involves emotion. Common experience and careful research both confirm that human emotion conditions very rapidly and easily. Particularly when the emotion is intensely felt or negative in direction, it will condition quickly. For example, this is shown in particular of victims of abuse and rape or someone involved in a horrific fire or car crash.

EVALUATION

Clearly, Classical Conditioning is a pervasive form of influence in this world. It is a natural feature of all humans and it is relatively simple and easy to accomplish.

Behaviourists' stress the role of environmental issues in swaying behaviour, to the near exclusion of inherited or natural causes. Amounting in effect to a focus on learning. The key form of learning is conditioning, either classical (Pavlovian), which is the basis of Watson's behaviourism, or Operant, which is at the centre of Skinner's.

There is little difference between animals and humans when it comes to learning, therefore research can be carried out on both. Skinner proposed that the way humans learn superstitious behaviour is much the same way as animals. Skinner (1904) demonstrated this when he conducted a study on pigeons.

Classical conditioning says nothing about rewards and punishments, which are key terms in reinforcement theory (Operant conditioning). There is nothing indicated here about rewards or punishment. Classical conditioning is built on creating relationships by association over trials. Some people confuse Classical conditioning with Reinforcement theory.

CONCLUSION

Human fears may often be maintained through avoiding the object of our fears, in that we do not give the fear a chance to undergo extinction. For example, if you have a fear of spiders you may avoid locations where they might be or if you have a fear of heights you would avoid being high up at all costs.

Classical conditioning focuses on behaviour that is not under our voluntary control (reflexive behaviour). Any reflex can be conditioned to occur to a previous neutral stimulus. We can be classically conditioned so that your mouth opens when you see fruit, your heart rate increases

when you see a hospital or you experience sexual arousal when you see a pint of lager!

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