

# Differences between classical and operant conditioning



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Learning is a constant process moulding our behaviour from pre-birth to death enabling humans to attain an understanding of the world. This area of psychology has been studied since the late nineteenth century by Ivan Pavlov with his classical conditioning theory (learning by association), the early twentieth century with Burrhus Skinner's composition of operant conditioning (linking a certain behaviour to a certain repercussion of demonstrating such conduct) (McLeod, 2014). More recently in the late seventies, Albert Bandura proposed the 'Social Learning Theory'. In his work, he was not satisfied with the other behavioural learning models conclusion on conditioning behaviour. Bandura believed human conduct to be formed from watching others and repeating their actions. Before long in a 1965 study he demonstrated how an individual in a movie demonstrating violent behaviour through physically striking a bobo doll lead to the youngsters copycatting his/her behaviour. SLT differs from classical and operant conditioning in a few ways: social learning theory avoids an animal's acquisition of behaviour, ideologues of SLT believe learning is more complex than simply an input and a reaction, other mental processes connect the two and lastly SLT centres on learning via other peoples conduct and not conditioning participants into repeating behaviours (Gross, 2001). Briefly, this essay will provide a general description of classical and operant conditioning with a final roundup of the similarities and differences for both and provide further research examples relevant to both learning types. In addition, the real life applications of classical and operant conditioning including the behaviourist therapy (Systematic Desensitisation), which helps people, overcome mental illness.

With regard to classical conditioning, Blumenfeld (2008) argues that a variety of research has this conditioning method at the core. Ivan Pavlov during the ten years prior to the year 1900 was originally studying the canine gastrointestinal system and evidently, he found that the trio of glands in the oral cavity release saliva depending on certain untaught responses to a stimulus. In brief, Woollard (2010) outlines Pavlov's study. He had dogs locked in an experimental compartment and attached a hollow cylinder that enabled their saliva to run through it. While monitoring their actions, the canine's occasionally drooled at the sight of meat. Eventually, the researcher discovered a link between drooling and an approaching researcher or the food dispenser noise. Then he attempted to pair the food distribution alongside the bell's noise (CS). Pre-study the bell was a neutral stimulus inducing no drooling. As a result, the unconditioned stimulus (glimpse of food) and the conditioned stimulus (the bell) creates a conditioned response (drooling). Now the first stage labelled acquisition (Schacter et al., 2012) is complete since the canine has devised a close connection between bell and drooling, the canine will not only drool in response to viewing the food (Woollard, 2010). Afterwards, second-order conditioning can possibly take place - no longer needing the bell and food association instead, an alternative noise from a toilet could stimulate drooling. However, the bell (CS) and the sight of food (UCS) together will weaken in effect, as the bell, ringing continues but the presentation of food ceases, this is extinction. Lastly, spontaneous recovery may develop meaning the behaviours can return after a whole day (Schacter et al., 2012). Classical conditioning is applicable to real life. For instance, Cherry (2014a) suggests Pavlovian conditioning is relevant in education. It is utilised through educators creating <https://assignbuster.com/differences-between-classical-and-operant-conditioning/>

pleasant surroundings for pupils that aids them in conquering their nervousness in fearful situations. The educator enables the pupil to construct a brand new correlation between an unnerving predicament (class presentation) and an amiable environment to put the pupil at ease in similar future occurrences.

Before Skinner made his mark with operant conditioning, Edward Thorndike had already developed similar notions. Edward Thorndike's ' Law of Effect' (1905) denotes that the subject needs to experience a positive reaction from a stimulus in order to increase the chance of the behaviours future repetition and vice versa (Magoon and Critchfield, 2008).

Two decades later, John Watson and Rosalie Rayner (1920) developed Pavlov's ideas further by using classical conditioning on an infant called Little Albert. Field and Nightingale (2009) explain the method they implemented in conditioning Little Albert. In brief, the main goal of the study was to manifest how the feeling of horror in a person towards a stimulus that formerly induced no reaction now would increase the individual's ability to feel terror when in the presence of a distressing incident for a set period. As far as Little Albert was concerned, the researchers investigated how afraid the infant was regarding ear-splitting noise by battering a hammer off a steel bar at the back of his skull. After each whack with the hammer, he became even more timid and he eventually shrieked in fear. Similarly, to Pavlov's research, he utilised classical conditioning and the (UCS) became the ear spitting sound with a white rat as the (CS). Resultantly the (UCS) was removed and the (CS) alone was enough to provoke the same response. The conditioned Little

Albert associated the white rat (CS) with feelings of terror (CR) but Watson <https://assignbuster.com/differences-between-classical-and-operant-conditioning/>

and Rayner had no opportunity to remove the fear he learned and he may have never broke free of the phobia (Field and Nightingale, 2009).

On the other hand, Burrhus Skinner a key figure of operant conditioning entertained another viewpoint by the mid twentieth century. Bennett (1990) outlines Skinner's theory in centring on the effect of the surroundings in the learning process of animals or humans and observe the repercussions of such a setting. Yet he did acknowledge the hereditary impact as well. His ideas stand apart slightly to Thorndike's ones; he merely added an additional feature in the form of reinforcement and avoided the usage of unpleasant stimulus (Bennett, 1990). Reinforcement can be either positive or negative but both maintain behaviour. Schacter et al. (2012) describes how the 'Skinner box' study demonstrates the usage of schedules of reinforcement on animals. First, fixed interval - the means to carry out the strengthening of behaviour occurs once a certain period has passed since the earlier reinforcement. In addition, the next reaction afterwards generates the stimulus. In addition, variable interval is a schedule similar to fixed interval but the elapsed time changes between stimuli. The fixed ratio schedule commences depending on the amount of reactions and finally the variable ratio schedule elucidates a certain mean amount of reactions are needed before reinforcement starts. Sweeney (1999) suggests positive reinforcement is in operation when a canine travels on foot to the left hand side and at first obtains a prize for moving leftwards. The dogs' caretaker issues more treats on occasions where the dog makes a further shift to the left. After a set period, the dog only attains a treat if it walks a three hundred and sixty degree circuit (Sweeney, 1999). Negative reinforcement in AllPsych

(2011) suggests the deletion of something unpleasant raises the odds of the participant carrying out the task in future. For example, meeting certain targets at work each week to avoid the boss's wrath. In addition, Skinner believed punishment causes a behaviours removal or simply reduces it (McLeod, 2014).

As for a behaviourist treatment of mental disorders, system desensitisation draws on core classical conditioning ideas. Rachman (1967) argues that system desensitisation dominates the practice of behavioural therapy. In the mid twentieth century, Joseph Wolpe devised this method to guide patients through a systematic process and ultimately the responses demonstrating a somewhat fixed state of worry and uneasiness face extinction. Jacobson (1938) highlighted the effectiveness of this treatment in fighting against mental disorders, which inflict anguish on sufferers. Mainly Wolpe believed introducing responses, involving mental rest or supplying patients with food minimises the anxiety's strength. Numerous points accentuate distinctions between classical and operant conditioning.

In summary, the main differences between classical and operant conditioning. Cherry (2014b) exhibits classical conditionings as learning through the pairing of a stimulus and an instinctual reaction. Whereas operant conditioning is a learning process involving, an intentional action followed by a repercussion. Secondly, the participant in operant conditioning receive inducements but classical conditioning learners have no such luxury. Not forgetting that operant learners have more of an active role in the acquisition process than their classical equals (Cherry, 2014b). Yet stark similarities connect the two as Gross (2001) claims the behaviourist school <https://assignbuster.com/differences-between-classical-and-operant-conditioning/>

including classical and operant conditioning plays down the part of genetic elements and underline environmental ones instead. Furthermore, the pair of conditioning processes are a version of learning by association denoting that after a stimulus and response link, previously non-existent affinities appear due to the learning procedure (Gross, 2001).

Overall, classical and operant conditioning have revolutionised psychology. Pavlovian conditioning altered the direction of psychology forever by illustrating the way animals can learn. Especially when applying this learning to a classroom situation that aids every pupil's attempts in overcoming the nightmare task of class presentations. Moreover, systematic desensitisation has been an effective therapy for anxiety sufferers throughout the world. Concerning operant conditioning, my workplace notably stresses on workers meeting targets and the manager can become unkind so negative reinforcement is at work when i strive to sell enough promotional products to avoid the uncomfortable end of day conversation with the manager. Therefore, both learning theories belong in the psychology hall of fame but more research needs conducting to improve standalone behavioural therapies rather than a cognitive behavioural therapy that blames patients for creating their problems.

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Kieran Bark