

Classical conditioning and operant conditioning theories



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BEHAVIOURISM

WRITE AN ESSAY THAT ANALYSES AND EVALUATES PAVLOV'S WORK ON CLASSICAL CONDITIONING AND SKINNER'S WORK ON OPERANT CONDITIONING

Behaviourism is a psychological approach that focuses on observable behaviour. The theory behind behaviourism is that all humans are born 'tabula rasa', a blank slate, with only the capacity to learn. The behaviourist approach believes that this learning comes from an individual's experiences with the environment and this is what shapes an individual's behaviour. There are two main theories associated with this approach, that of classical conditioning discovered by Ivan Pavlov and operant conditioning discovered by B. F Skinner. I will begin this assignment first by analysing the work of Ivan Pavlov and classical conditioning, before evaluating the studies used to support his findings. I will then use the same process to analyse and evaluate the work of B. F Skinner and operant conditioning.

PAVLOV: CLASSICAL CONDITIONING

Classical conditioning is a theory, first introduced by Ivan Pavlov, that suggests two items (stimuli) can be linked together to produce a set response. Pavlov was a physiologist who was interested in the automatic reflexes of animals. In particular Pavlov was interested in the salivatory reflex in dogs. Through his work on animal digestive systems Pavlov discovered that this automatic reflex cannot be altered by experience but it

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can be affected by certain experiences. This information is what formed the basis of Pavlov's studies into classical conditioning (Bailey *et al* , 2009). Pavlov identified four main principles of classical conditioning. These are known as the unconditioned stimulus (US), the unconditioned response (UR), the conditioned stimulus (CS) and the conditioned response (CR). Pavlov's aim was to show that an animal (a dog) could be taught to associate a US (food) with an UR (salivation). To do this Pavlov took a neutral stimulus (a bell) and rang it at the same time as producing the food, the dogs obviously salivated as soon as the food was presented. Each dog was fitted with a fistula in their cheek in order to catch the saliva to be measured. After doing this many times Pavlov noticed the dogs began to salivate as soon as the bell rang. He then rang the bell without producing the food and the dogs still salivated in the same way, meaning the bell had become a CS and the salivation had become a CR (Moodle, 2014).

Ivan Pavlov has shown that classical conditioning applies to animals, but does it also apply to humans as well? Since Pavlov's discovery there have been numerous research studies showing that classical conditioning can be affective in humans as well as animals. In support Watson & Raynor (1920) showed that it was possible to condition a fear response in a child by banging a hammer on a pole every time Albert (the child) touched a fluffy white rat. Albert, although not originally scared of the rat, soon gained a fear response each time the rat was produced. This fear was then transferred to other white fluffy objects (Watson & Raynor, 1920 cited in Anon, n. d).

However, there are problems with Watson's (1920) research, the biggest of these being the major ethical concerns over conditioning a child without

parental consent. This theory is also biased in its views leaning to nurture and not nature, making the approach deterministic and reductionist completely ignoring other factors such as biology and free will.

Therefore Pavlov's experimentation method may have been flawed. Despite this flaw, this research implies that this approach does have valid findings so therefore can be generalised to aid the understanding of human behaviour.

SKINNER: OPERANT CONDITIONING

Operant conditioning is a theory, introduced by B. F Skinner, which suggests the best way to understand human behaviour is to look at the cause of an action and its consequences. Skinner based his work on Edward Thorndike's theory on the 'Law of Effect'. Skinner introduced the theory of reinforcement, suggesting that behaviour which is reinforced tends to be repeated (strengthened) while behaviour which is not reinforced fades away (is weakened). Skinner studied his theory with rats in specially designed 'Skinner boxes'. These boxes contained a lever in them that when knocked would release a pellet of food for the rat. At first the rats just moved around the boxes and eventually they knocked the lever by accident. After a while the rats learned to go straight to the lever every time and the consequence of receiving the food pellet meant the rats would continue to press the lever, showing positive reinforcement. Skinner also showed negative reinforcement by giving the rats electric shocks and when the lever was pressed the shocks would stop. Again the rats soon went straight to the lever every time and the consequence of the unpleasant event (electric shocks) coming to an end ensured the rats would again continue the behaviour. Skinner also

introduced the term of punishment in operant conditioning. This is designed to decrease or eliminate a response and is the opposite of reinforcement (Skinner, 1948, Thorndike, 1905 cited in Mcleod, 2007).

Skinner has shown that operant conditioning can be applied to animals but can these findings be applied to humans as well? The application of operant conditioning has come a long way since the 1940's. There are now a number of therapies and treatments, directed at behaviour modification, used worldwide. These therapies seek to shape behaviour by rewarding or reinforcing the desired behaviour. These rewards are given in the form of tokens known as reinforcers. Although these are not direct reinforcers, more secondary reinforcers, they will later be traded for the direct reinforcer (Wexler, 1973). This is better known as 'Token Economy'. Token economy systems can be seen in everyday use, such as in mental institutions or with the use of sticker charts for misbehaving children. In support of operant conditioning/token economy one of the first studies on token economies was conducted by Dr. Nathan Azrin & Teodoro Allyon and began in 1958. After taking over charge of a mental hospital with the majority of patients being schizophrenic Azrin and Teodoro designed the bartering system of token economy to persuade patients to dress to begin with and then moved on to more challenging tasks as a way to control their behaviour, with successful results (Vitello, 2013).

Therefore Skinner's experimentation methods may have been flawed.

Despite this flaw, this research implies that this approach does have valid findings so therefore can be generalised to aid the understanding of human behaviour.

Both of these studies have shown classical conditioning and operant conditioning can be useful in both animals as well as humans as separate topics. However by recognizing that these two processes occur at the same time can also add to the understanding of human behaviour, such as conditioned fears. With Watson's experiment on Albert he showed that conditioned fears do not disappear quickly, if at all and the reason for this seems to be that the feared object will trigger the operant escape behaviour. The fact that fear can also evoke an operant response is significant in terms of everyday fears such as phobias. Another way to explain this is that the conditioned fear could also be sustained by reinforcement or operant conditioning. For instance if a phobia is due to classical conditioning the individual may receive attention and sympathy thus reinforcing the fear meaning there is less chance of overcoming the phobia (Glassman & Hadad, 2008).

Through evaluation of Pavlov's and Skinner's experiment it is clear to see that although they each have various strengths and weaknesses they both play a vital role within the study of human behaviour, with valid and practical applications to better aid the understanding of the human race, however if they were considered as one element instead of two they may be even more effective.

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