

Principles of classical conditioning and operant conditioning



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Classical conditioning & Operant Conditioning

Ivan Pavlov was a Russian scientist who derived theory of learning from his experiment with dogs. His theory is known as classical conditioning (King, 2017). In classical conditioning, the conditioned stimulus or CS is paired with an unlearned unconditioned stimulus or US, this pairing result in a conditioned behavioral response known as CR. The conditioned response is elicited from previous neutral stimulus. The unconditioned stimulus is a significant stimulus, it can be food or pain which can trigger an unconditioned response or UR in the beginning. The conditioned stimulus remains neutral in the start, but triggers a response after association. The conditioned response decreases when the unconditional stimulus unlike food is not presented with the conditioned stimulus like salivation. This is known as extinction. In spontaneous recovery, the previous conditioned response comes back (Psychology, 2019). In the experiment, Pavlov presented the dog with unconditioned stimulus like food. The unconditional response was the natural salivation of dog when food as presented. The ringing of bell was conditioned stimulus. The dog's response to ringing of bell was conditioned response. These are the principles of classical conditioning.

The researchers conducted an experiment to understand concept of classical conditioning on consumer behavior and advertising. There is an experiment which shows conditioning of attitudes in four levels of unconditioned stimulus and conditioning pairing. There is a demonstration of latent inhibition due to exposure of conditioned stimulus multiple times leading to slow down of conditioning in 1 trial pairing and 10 trials. The third experiment reveals that further conditioning of attitudes is better than backward conditioning. The <https://assignbuster.com/principles-of-classical-conditioning-operant-conditioning/>

findings from first three experiments were extended to fourth experiment. There are some methodical problems faced. In short; all the experiments conducted invited more extensive research on concept of classical conditioning in consumers' behavior (Stuart, 1987). The first experiment tested whether consumer attitude is developed by classical conditioning with the help of advertisements. Secondly, it was studied if conditioned attitudes can be strengthened by further trials. Backward conditioning is studied in the third experiment where conditioned stimulus is preceded by the unconditional stimulus. The possible biases associated with three experiments were studied in the fourth experiment.

In real life, we can apply principles of classical conditioning. Usually, phobias are related to classical conditioning. We tend to fear things because of our learned responses to them. An example of nausea at mere sight of food is an example classical conditioning. Here, the food is unconditional stimulus. The conditioned stimulus is the hotel from where we ate the food. The unconditional response is feeling of nausea after eating it. The conditioned response is nausea when that food is presented. The individual experiences the weird feeling while eating the food at the same place, get triggered at mere sight of the hotel. Substance abuse is another example of classical conditioning where substance is unconditioned stimulus, the bar is conditioned stimulus, the unconditioned response is feeling of ecstasy and joy, the conditioned response is the feeling of joy at mere sight of the bar or place of drinking.

Operant conditioning is a learning method in which punishments and rewards are used for behaviors. The operant conditioning helped individual <https://assignbuster.com/principles-of-classical-conditioning-operant-conditioning/>

learn by the consequences of his behavior or actions. This was originated by B. F. Skinner. The basis of classical conditioning is law of effect by Thorndike. Skinner used the term reinforcement to further explain the law of effect. Reinforcement is a concept which shows that behavior tends to be repeated if followed by reinforcement. The behavior is extinguished if there is no reinforcement. An experiment was conducted with animals using the Skinner box. There are three principles i. e. neutral operant, reinforcers and punishers. The neutral operant is environmental responses which increase or decrease the likelihood of behavior. The reinforcers strengthen a behavior. Punishment weakens the behavior and decrease likelihood of certain behavior. There are two types of reinforcement like positive and negative reinforcement (McLeod, 2018). The positive reinforcement is something which is added to increase likelihood of behavior, and in negative reinforcement, a negative stimulus is removed to increase likelihood of behavior.

This experiment was conducted by researchers to demonstrate the concept of operant conditioning principles on honey bee. The primary methodologies like sting extension, extension reflex, and free flying target were studied. The cap pushing response was used to study effects of operant conditioning on honey bees. The learning curves for novel auto shaping and traditional explicit shaping was studied with the help of CPR. The bees had to push a cap to uncover source of food. The auto shaping and explicit shaping techniques were studied. The learning was different in control and shaped bee experiments. Auto shaped bees learned in one trial. Shaped bee learnt three times faster (Charles I. Abramson, 2016).

References

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