

OPERANT CONDITIONING

by:

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One of the most used theories used in learning is operant conditioning. Most may not know what operant conditioning is, but they are most likely using this theory unconsciously. In the article on operant conditioning by Saul McLeod (2018), the consequences of a reaction determine the likelihood of it being repeated, according to the process of learning. Behavior that is rewarded is more likely to be repeated through operant conditioning, while behavior that is punished is less likely to continue.

In addition, in operant conditioning, there are three types of responses that can follow behavior (Macleod, 2018). The three types of responses are Neutral Operant, Reinforcers, and Punishers. A neutral operant does not affect the likelihood of a behavior being repeated. Reinforcers, on the other hand, increase the probability of specific behavior being repeated.

There are types of reinforcers, positive and negative. Lastly, punishers decrease this likelihood. Positive reinforcement strengthens a reaction or behavior through rewards, resulting in the repetition of the desired behavior. The reward serves as a motivator. Negative reinforcement occurs when an unpleasant situation is terminated because of a reaction. Negative reinforcement, on the other hand, is defined as the removal of an undesirable stimulus that is rewarding to the animal or person is known as negative reinforcement. While reinforcements aim to strengthen behaviors, punishments aim to weaken them.

Punishment, like reinforcement, can function by immediately giving an unpleasant stimulus following a response, such as a shock, or by eliminating a potentially rewarding stimulus.

It should be noted that punishments and negative reinforcements can be easily confused with each other. Another factor that affects learning in operant conditioning is the way you deliver the reinforcements. It can affect the response rate and extinction rate. Response rate refers to how the learner responded to the reinforcement. Did the learner repeat the behavior faster? Extinction rate on the other hand refers to how fast the learner loses the behavior.

Behaviorists suggest ways on how and/or when to give these reinforcements. According to Annabelle G.Y. Lim, the operant conditioning process includes a reinforcement schedule. It is made up of a system that determines when conduct should be reinforced. For instance, whether to encourage based on the number of responses or the length of time. Depending on the schedule, it will affect the response rate and the extinction rate of the learner's behavior.

The first type is continuous reinforcement. Reinforcement is given every time the desired behavior is achieved in continuous schedules. The response rate is slow while the extinction rate is fast. The learner has grown to anticipate their behavior to be reinforced every time they do it, and they get frustrated quickly if it is not.

The next one is the partial reinforcement schedule. Partial schedules, unlike continuous schedules, only promote the desired behavior on occasion rather than all the time, thus resulting in ineffective learning since it is more difficult to make the connection between behavior and reinforcement at first. Partial schedules, on the other hand, result in behavior that is more resistant to extinction.

Another one is the fixed interval schedule. A fixed-interval schedule is when a reward is given to the desired response after a particular (known) length of time has

passed. As a result of this schedule, organisms have a propensity to increase the frequency of responses as the expected time of reinforcement approaches. The frequency of answers, on the other hand, diminishes quickly after being reinforced. Because response rates fluctuate, a fixed-interval plan will produce a scalloped pattern rather than consistent response rates.

The next one is the variable interval schedule. When a random (unpredictable) length of time has passed and a certain behavior has been completed, the reinforcement is given on a variable interval schedule. Because organisms have no idea when they will receive reinforcers next, this timetable results in a low, consistent response rate.

Then we have the fixed ratio schedule. After a certain number of right responses is a fixed-ratio plan that reinforces the behavior. The response rate in this type of schedule is fast while the extinction rate is medium.

Finally, the variable-ratio schedule is a plan that reinforces a behavior after a random number of responses. This type of plan results in high, consistent response rates. Individuals persevere in reacting in the hopes that the next reaction will be the one that will result in reinforcement. In lottery games, this schedule is used.

Operant conditioning may be used in so many ways and utilized by many. If we use it correctly based on the learning habit of different students, we can assure that learning can be maximized to the fullest. We should open our minds to many possibilities and be creative in thinking of ways on how we can teach our students the things that they should learn.

References:

Lim, A. G. Y. (2020, July 2). Schedules of Reinforcement. Schedules of Reinforcement | Simply Psychology. <https://www.simplypsychology.org/schedules-of-reinforcement.html#intro>.

McLeod, S. (2018). What Is Operant Conditioning and How Does It Work? Operant Conditioning (B.F. Skinner) | Simply Psychology.
<https://www.simplypsychology.org/operant-conditioning.html>.