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Personality course

02-20-2023

“APA Paper Topic”

Skinner’s Operant Analysis;

“Reinforcement schedules and their impact on behavior; continuous reinforcement or variable-
ratio reinforcement

Abstract:

This paper reviews and summarizes Skinner's operant analysis, a fundamental concept in the field of psychology that has significant implications for understanding how behavior is shaped and maintained. Skinner's approach is based on the idea that behavior is not only influenced by external stimuli but can be modified through the application of positive or negative consequences. Reinforcement schedules are a crucial component of Skinner's operant analysis, which refers to the frequency and timing of the delivery of positive consequences.

Reinforcement schedules can be divided into two broad categories: continuous reinforcement and variable-ratio reinforcement. Continuous reinforcement involves the delivery of a positive consequence after every instance of a behavior and is most effective in promoting the acquisition and maintenance of a new behavior. On the other hand, variable-ratio reinforcement involves the delivery of a positive consequence after a variable number of instances of a behavior and is most effective in maintaining a behavior that has already been acquired. The impact of these reinforcement schedules on behavior is significant, and their careful application can provide important insights into the process of behavior modification. Moreover, Skinner's operant analysis also emphasizes the role of punishment in modifying behavior. In conclusion, this paper highlights the importance of understanding Skinner's operant analysis and reinforcement schedules to develop effective interventions for promoting desirable behaviors while avoiding negative emotional reactions.

Skinner's operant analysis is a fundamental concept in the field of psychology that has significant

implications for understanding how behavior is shaped and maintained. Skinner's approach is based on the idea that behavior is not only influenced by external stimuli but can be modified through the application of positive or negative consequences. Skinner's operant analysis has been thoroughly researched and studied by psychologists. For example, according to a study by Baum (2005), "Skinner's analysis of operant behavior has been widely influential in psychology and other fields, and has led to many applied technologies that are used to modify behavior in clinical, educational, and organizational settings" (p. 119). This demonstrates the impact of Skinner's approach on the field of psychology and its practical applications.

Reinforcement schedules are a crucial component of Skinner's operant analysis. A reinforcement schedule refers to the frequency and timing of the delivery of positive consequences, which can include rewards such as praise, money, or access to desirable activities. Reinforcement schedules can be divided into two broad categories: continuous reinforcement and variable-ratio reinforcement. (Smith, 2021)

Continuous reinforcement involves the delivery of a positive consequence after every instance of a behavior. This type of reinforcement schedule is most effective in promoting the acquisition and maintenance of a new behavior. For example, if a child receives praise every time they complete their homework, they are more likely to continue doing their homework in the future. Furthermore, A dog who is given a portion of food every time they sit on command will quickly learn to associate sitting with receiving that food. This reinforcement schedule can be very effective in teaching a new behavior. In this case, the food to the dog is given as a continuous reward to motivate the reproduction of the triggered behavior. Also, this conditioning method

and its techniques can also be implemented in a negative context or to condition someone to engage in a negative behavior. Just like in the series Hunger Games, Peeta Mellark's character undergoes a significant transformation as he is conditioned to see Katniss Everdeen as an enemy. This conditioning takes place during the 74th Hunger Games when Peeta and Katniss are both selected as tributes from District 12. Peeta's initial feelings towards Katniss are genuine, as he harbors a longstanding crush on her. However, as the games progress, Peeta's mentor, Haymitch Abernathy, advises him to present a false narrative to the audience by acting as if he is in love with Katniss. This deliberate manipulation by Haymitch is part of a strategy to gain sympathy and support from the sponsors, as romance in the arena tends to capture the audience's attention. Peeta, driven by his desire to survive, complies with this plan and begins to play the role of a star-crossed lover, publicly professing his affection for Katniss. This act sets the stage for an internal conflict within Peeta as he tries to reconcile his genuine feelings for Katniss with the fictional portrayal he is forced to adopt. Lastly, this scene in the series shows how someone can be forced or thought to associate positive events or objects with a negative event redirecting the negative outcomes towards the positive event or individual.

Another image of this reinforcement/ behavior dynamic is seen often in workplaces. For example, an employee who receives praise from their boss every time they complete a task well is likely to continue performing well in the future. The positive reinforcement of praise serves as a motivator to continue the behavior.

The rationalization for continuous reinforcement is that it creates a strong association between a behavior and a positive consequence. By delivering a reward every time a behavior is exhibited, the individual learns that the behavior is desirable and will continue to engage in it in the future.

I also believe that this method is as productive as it is, because the individual receiving the instant reward will learn and understand faster the association intended, as opposed to when people are given the reward after a fixed schedule.

Variable-ratio reinforcement involves the delivery of a positive consequence after a variable number of instances of a behavior. This type of reinforcement schedule is most effective in maintaining a behavior that has already been acquired. If a person receives rewards randomly for exercising, they are more likely to continue exercising in the future, even if they do not receive a reward every time they work out. For instance, a gambling machine at a club gives an irregular probability of winning a big stake, yet the probability of winning is low. Notwithstanding this, individuals will keep on playing the machine in view of the variable-proportion support plan, they never know when they could win but still are motivated to take the risk. “In a lab setting, this might involve delivering food pellets to a rat after one bar press, again after four bar presses, and then again after two bar presses.” (Cherry, K. 2023, March 13) Moreover, an understudy who periodically gets bonus recognition on tasks will keep on investing energy in view of the chance of getting additional recognition, regardless of whether it happens without failure.

The defense for variable-proportion support is that it makes a steady way of behaving that is less inclined to be quenched when the prize is not presently introduced. The flightiness of when the prize will be given makes a feeling of expectation and energy, which can keep the individual taking part in the way of behaving.

It's likewise significant that support timetables can be consolidated, for example, a fixed-stretch

support plan (reward given after a brief time frame) or a variable-span support plan (reward given after a variable measure of time). The decision of support timetable will rely upon the ideal result and the singular's inspiration for the way of behaving. For instance, on the off chance that the objective is to show a different behavior, constant support might be more powerful, while assuming that the objective is to keep a conduct over the long term, variable-proportion support might be more compelling.

The impact of these reinforcement schedules on behavior is significant. Continuous reinforcement is effective in promoting the acquisition and maintenance of new behaviors, but it can also lead to a decrease in the behavior if the reinforcement is removed. On the other hand, variable-ratio reinforcement is effective in maintaining behavior over the long-term, even if the reinforcement is not delivered consistently.

Moreover, Skinner's operant analysis also emphasizes the role of punishment in modifying behavior. Punishment involves the delivery of a negative consequence after a behavior, which can include verbal reprimands or the removal of rewards. While punishment can be effective in reducing undesirable behaviors, it can also lead to negative emotional reactions, such as anxiety and fear.

In conclusion, Skinner's operant analysis and reinforcement schedules provide important insights into the process of behavior modification. By understanding the impact of continuous and variable-ratio reinforcement, psychologists can develop effective interventions for promoting the acquisition and maintenance of desirable behaviors. Moreover, the careful application of punishment can also play a role in behavior modification, but it should be used judiciously to avoid negative emotional reactions. "Reinforcement typically decreases response variation,

including such dimensions of responding as location, duration, force, and topography, ” (Lattal, K. A. 2013).

Reference

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