

Lecture 13

Book: Behavior Modification What it is and How to do it

Chapter 13: Establishing Behavior by Escape and Avoidance Conditioning

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Summary

Escape conditioning: The principle of escape conditioning states that removal of certain stimuli called aversive stimuli immediately after the occurrence of a behavior will increase the likelihood of that behavior. Escape conditioning is similar to punishment in that both involve the use of an aversive stimulus. While escape conditioning and punishment are therefore similar, they differ procedurally in terms of both the antecedents and the consequences of behavior. With regard to antecedents, the aversive stimulus used in escape conditioning must be present prior to an escape response, whereas the aversive stimulus (punisher) is not present prior to a response that is punished. With regard to consequences, escape conditioning removes the aversive stimulus immediately following a response whereas punishment presents the aversive stimulus or punisher immediately following a response. In terms of results, the punishment procedure decreases the likelihood of the target response whereas the escape conditioning procedure increases the likelihood of the target response.

Avoidance conditioning: The principle of avoidance conditioning is a contingency in which a behavior prevents an aversive stimulus from occurring thereby resulting in an increase in the frequency of that behavior. One difference between escape and avoidance conditioning is that an escape response removes an aversive stimulus that has already occurred while an avoidance response prevents an aversive stimulus from occurring at all. Another difference between escape and avoidance conditioning is that the latter often involves a warning stimulus (also called conditioned aversive stimulus), which is a stimulus that signals a forthcoming aversive stimulus. Avoidance conditioning which includes a warning signal that enables the individual to discriminate a forthcoming aversive stimulus is called 'discriminated avoidance conditioning'. Avoidance conditioning is also common in everyday living. E.g. students learn to give the right answers on tests to avoid poor grades.

Pitfalls of escape and avoidance conditioning:

Pitfall type 1: People often unknowingly strengthen other's undesirable behavior by allowing such behavior to lead to escape or avoidance of aversive stimuli. Observations of family interactions by Snyder, Schrepferman and St. Peter (1997) indicated that parents of children labeled as antisocial frequently strengthened aggressive behavior in their children by backing off or giving in when the aggressive behavior occurred. Parents may inadvertently establish inappropriate verbal behavior with a child who desperately promises to be good to escape or avoid punishment for some infraction of parental authority. When such pleas are successful, the pleading behavior is strengthened and thus increased in frequency under similar circumstances, but the undesirable behavior the parent meant to decrease may have been affected while the undesirable target response may persist in strength. A second variety of pitfall type 1 is the inadvertent establishment of conditioned aversive stimuli to which an individual then responds in such a way as to escape or avoid them. For e.g. if a coach yells at, criticizes, and ridicules athletes, the athletes may show improved skills primarily to avoid or escape the coach's wrath. But in the process, the coach has become a conditioned aversive stimulus for athletes, so that they are now likely to avoid the coach off the athletic field. If the coaching tactics become too aversive, everything associated with the sport will become aversive, and some team members might even quit it entirely. A third variety of pitfall type 1 is that in some situations, a person might be inadvertently influenced by escape and avoidance conditioning to positively reinforce the undesirable behavior of others.

Guidelines for the effective application of escape and avoidance conditioning:

1. Given a choice between maintaining behavior on an escape or an avoidance procedure, the latter is to be preferred because in escape conditioning the backup aversive stimulus must be present prior to the target response, whereas in avoidance conditioning, the backup aversive stimulus occurs only when the target response fails to occur. Secondly, in escape conditioning the target response does not occur when the backup aversive stimulus is not present, whereas in avoidance conditioning, responding decreases very slowly when the backup aversive stimulus may no longer be forthcoming.
2. The target behavior should be established by escape condition before it is put on an avoidance procedure.
3. During avoidance conditioning, a warning stimulus should signal the impending aversive stimulus. This enhances conditioning by providing a warning that failure to respond will result in aversive stimulus.
4. Escape and avoidance conditioning, like punishment, should be used cautiously. Because these procedures involve aversive stimuli, they can result in harmful side effects such as aggression, fearfulness, and a tendency to avoid or escape any person or thing associated with the procedure.
5. Positive reinforcement for the target response should be used in conjunction with escape and avoidance conditioning. This will not only help to strengthen the desired behavior but also will tend to counteract the undesirable side effects mentioned.

6. The individual concerned should be told, to the best of his or her understanding, about the contingencies in effect.