

[Lecture 3]

Book Behavior Modification – What it is and How to Do it

Chapter 3 Getting a Behavior to Occur More Often with Positive Reinforcement

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Summary

Positive reinforcement- A positive reinforcement is a stimulus that, when presented immediately following a behavior, causes the behavior to increase in frequency. It is roughly synonymous with the term 'reward'. The principle called positive reinforcement states that if in a given situation, somebody does something that is followed immediately by a positive reinforcer, then that person is more likely to do the same thing again when he or she next encounters a similar situation.

Factors influencing the effectiveness on positive reinforcement:

- Selecting the behavior to be increased: the behavior to be reinforced must first be identified specifically. Being specific helps to ensure the reliability of detecting instances of the behavior and changes in its frequency and increases the likelihood that the reinforcement program will be applied consistently.
- Choosing reinforcers (different strokes for different folks): some stimuli are positive reinforcers for everyone. For example, food is a positive reinforcer for who has not had anything to eat for several hours. Candy is a reinforcement for most children. The important thing is to use a reinforcer that is effective with the person with whom we are working. Most positive reinforcers can be classified under five somewhat overlapping categories:
 - i) Consumable- these reinforcers are items that one can eat or drink.
 - ii) Activity – examples include looking at a book, reading a picture book, staring out a window etc.
 - iii) Manipulative- these reinforcers include the opportunity to play with a favorite toy, paint or color, surf the internet etc.

- iv) Possessional reinforcers- the opportunity to wear one's favorite shirt, sit in one's favorite chair, have a private room or enjoy some item that one can possess.
- v) Social- these reinforcers include affectionate pats and hugs, praise, smiles, or some indication of social attention.

A considerable amount of trial and error may be involved in finding an appropriate reinforcer for a particular individual. Another method is simply to observe the individual in everyday activities and note those activities engaged in most often. The Premack principle states that if the opportunity to engage in a behavior that has a high probability of occurring is made reliant on a behavior that has a low probability of occurring, then the behavior that has a low probability of occurring will be strengthened. No matter how we select a potential reinforcer for an individual, it is always the individual's performance that tells us whether we have selected an effective reinforcer. We have to choose a behavior that the individual emits occasionally and that does not appear to be followed by an reinforcer, record how often the behavior occurs without reinforcement over several trials, and then present the item immediately following the behavior for a few additional trials and see what happens. If the individual begins to emit that behavior more often, then the item is indeed a reinforcer.

- Motivating operations: most reinforcers will not be effective until the individual has been deprived of them for some period of time prior to their use. In general, the longer the deprivation period, the more effective the reinforcer will be. The term 'deprivation' is used to indicate the time during which an individual does not experience a particular reinforcer and 'satiation' refers to a condition in which an individual has experienced a particular reinforcer to such an extent that it is temporarily no longer reinforcing. Events or conditions such as deprivation and satiation that temporarily alter the effectiveness of a reinforcer and alter the frequency of behavior reinforced by that reinforcer are called motivating operations (MO). In everyday life, people might say that depriving one of food motivates that individual to eat. Similarly they might say that giving an individual salted peanuts motivates them to drink.
- Reinforcer size- the size (amount or magnitude) of a reinforcer is an important determinant of its effectiveness. The optimum amount of a reinforcer to ensure its effectiveness depends on factors such as the difficulty of the behavior and the availability of competing behaviors for alternative reinforcers. The size of the reinforcer must be sufficient to strengthen the behavior that we want to increase. At the same time, the goal is to conduct a number of trials during a session, such as in teaching basic language skills to a person with developmental disabilities, the reinforcer on each trial should be small enough to minimize satiation and maximize the number of reinforced trials per session.

- **Instructions: use of rules** - Instructions can facilitate behavioral change in several ways. First, specific instructions will speed up the learning process for individuals who understand them. Instructions may influence an individual to work for delayed reinforcement. For example, study behavior may be influenced by the thought, “If I learn the answers to the questions listed in each chapter, I’ll likely get an A.” Adding instructions to reinforcement programs may also help individuals like children or persons with developmental disabilities to follow instructions.
- **Reinforcer immediacy:** For maximum effectiveness, a reinforcer should be given immediately after the desired response. The direct effect of a positive reinforcer is the increased frequency of response because it was immediately followed by that reinforcer. The indirect effect of a positive reinforcer is the strengthening of a response that is followed by that reinforcer even though the reinforcer is delayed. Delayed reinforcers may have an effect on behavior because of instructions about behavior leading to the reinforcer and/or because of self-statements that intervene between that behavior and the delayed reinforcer.
- **Contingent VS. noncontingent reinforcement:** A reinforcer is contingent when a specific behavior must occur before that reinforcer will be presented. Reinforcer is noncontingent when that reinforcer is presented at a particular time regardless of the preceding behavior. Educators often assume that creating a pleasant environment will improve the learning of the students in that environment. However, reinforcers must be contingent on specific behaviors in order for those behaviors to improve. Thus, to maximize the effectiveness of a reinforcement program, we’ve to be sure that the reinforcers are contingent on specific behaviors that we want to improve.
- **Weaning the learner from the program and changing to natural reinforcers:** A setting in which the individual carries out normal everyday functions is referred to as the natural environment. Reinforcers that follow behavior in the course of everyday living are called natural reinforcers. Reinforcers that are arranged systematically by psychologists, teachers and others in behavior modification programs are referred to as arbitrary, contrived or programmed reinforcers. The behavior modifier should always try to ensure that the behavior being established in a training program will be reinforced and maintained in the natural environment. If a behavior that has been strengthened in a reinforcement program is no longer reinforced at least occasionally, then that behavior will return to its original level.
- **Pitfalls of positive reinforcement:**

- Pitfall type 1: A principle can be misused by someone who is unaware of using it: Unfortunately, those who are not aware of positive reinforcement are apt to use it unknowingly to strengthen undesirable behavior. The hard work of one behavior modifier using appropriate behavior techniques can be hindered or completely undone by others who reinforce the wrong behavior.

- Pitfall type 2: a person may know the principle but not realize some ramification that interferes with applying it effectively: Novice behavior modifiers often assume that simply presenting reinforcers non contingently will strengthen a specific behavior.

- Pitfall type 3: A principle can be inaccurately used as an over simplified explanation of a change in behavior- reminding oneself of a delayed natural reinforcer for a behavior immediately after it occurs can strengthen that behavior. While attempting to explain the strengthening of a behavior by positive reinforcement, we should always look for an immediate consequence of that behavior.

- Pitfall type 4: Individuals without behavioral knowledge sometimes attempts to explain behavior or the lack of it by inappropriately giving people a label: For example, if a teenager leaves his room in a mess and does not do household chores but always spends a lot of time on facebook his parents may describe him as being just lazy. But a more accurate explanation would be that the teenager's friends provide frequent reinforcement for interaction on facebook and he or she has not received much reinforcement from his parents for helping around the house.

- Pitfall type 5: Some behavioral procedures aren't applied because they are quite complex and require specialized knowledge or training: for example, a parent who is unfamiliar with the principle of positive reinforcement may fail to reinforce a rare instance of a normally inconsiderate child showing polite behavior, thereby missing the opportunity to strengthen that behavior.