

# COGNITIVE-BEHAVIORAL PSYCHOTHERAPY

## LECTURE 10

### CHAPTER 6 PUNISHMENT

The behavioral principle of punishment: a person engages in a behavior that is immediately followed by consequences that make it less likely that the person would repeat the behavior in a similar situation in the future.

Punisher (also called an aversive stimulus) a consequence that makes a particular behavior less likely to occur in the future.

You cannot define punishment by whether the consequence appears unfavorable or aversive. You can conclude that a particular consequence is punishing only if the behavior decreases in the future.

A common misperception about punishment: Punishment is a technical term with a specific meaning when a behavior analyst speaks of punishment, they are referring to a process in which the consequence of a behavior results in the future decrease in the occurrence of that behavior. This is quite different from what most people think of as punishment. In general usage, punishment can mean many different things, most of them unpleasant.

#### Positive and negative punishment

##### Positive punishment

1. the occurrence of a behavior
2. is followed by the presentation of an aversive stimulus
3. and, as a result, the behavior is less likely to occur in the future

##### Negative punishment

1. the occurrence of a behavior
2. is followed by the removal of a reinforcing stimulus
3. and, as a result, the behavior is less likely to occur in the future.

Premack Principle as applied to punishment: when a person is engaged in a low probability behavior that is contingent on a high probability behavior, the high probability behavior will decrease in frequency. In other words, engaging in a problem behavior, a person has to do something he or she

doesn't want to do, the person will be less likely to engage in the problem behavior in the future.

Time out from positive reinforcement: this is an example of negative punishment

Response cost: the loss of a previously earned Reinforcer as a cost for misbehavior

Unconditioned Punishers: some aversive stimuli are naturally punishing because avoiding or minimizing contact with the stimuli has survival value. Painful stimuli or extreme levels of stimulation often are dangerous. Behaviors that produced painful or extreme stimulation are naturally weakened, and behaviors that result in escape or avoidance of such stimuli are naturally strengthened. For this reason, painful stimuli or extreme levels of stimulation have biological importance. Such stimuli are called unconditioned punishers.

Conditioned Punishers: are stimuli or events that function as a punisher only after being paired with an unconditioned punisher or other pre-existing conditioned punisher. The word "no" is an example of a conditioned punisher.

Outcome	Stimulus is presented	Stimulus is removed
Behavior is strengthened	Positive reinforcement	Negative reinforcement
Behavior is weakened	Positive punishment	Negative Punishment

### Factors Influencing the Effectiveness of Punishment

Immediacy: when a punishing stimulus follows a behavior immediately, or when the loss of a Reinforcer occurs immediately, the behavior is likely to be weakened. As the delay between the behavior and the consequence increases, the effectiveness of the consequence as a punisher decreases.

Contingency: to be most effective, the punishing stimulus should occur every time the behavior occurs. It is this 1:1 ratio that established the contingency. If punishment is applied inconsistently, or if the punisher is present in the absence of the behavior, punishment is less effective.

(Comment on schedules- why do they work for reinforcement but not for punishment).

### Establishing Operations

In the case of negative punishment, satiation makes the loss of some reinforcers less punishing, and deprivation makes the loss of some reinforcers more punishing.

In the case of positive punishment, any event or condition that enhances the aversiveness of a stimulus event, makes the event a more effective punisher, whereas, events that minimize the aversiveness of a stimulus event make it less effective as a punisher.

### Characteristics of the Consequence

The events that function as punishers vary from person to person. This may be particularly true of conditioned punishers.

Although in general the intensity of the aversive stimulus increases the effectiveness of the punisher, this also may vary from person to person.

However, there is also significant research to suggest that there is a clear point of diminished return in the intensity of aversive stimulus. Increases in the level of aversiveness increases the side effects (problems with punishment) of punishment more than it decreases the frequency of behavior.

### PROBLEMS WITH PUNISHMENT

Emotional Reactions to Punishment aggressive behavior or emotional response may occur as a result of the presentation of painful stimuli.

### Escape and Avoidance

Whenever an aversive stimulus is used as a punishment procedure, an opportunity for escape or avoidance is created. Any behavior that functions to avoid or escape from the presentation of an aversive stimulus is strengthened through negative reinforcement. (A child might runaway or hide from a parent who is about to spank the child)

Punishment as a Reinforcer to the punisher: There are significant research findings to suggest that the use of punishment can act as a negative reinforcer to the person applying the punishment. The undesirable behavior is an aversive stimulus to the punisher, and the termination of this aversive stimulus is reinforcing.

There is some research to suggest that the use of punishment may also function as a positive Reinforcer to the punisher. However, this sadistic pleasure requires a series of covert behaviors (thoughts) within the punisher and is more controversial as an explanation for the excessive use of punishment (Dynamics of aggression).

## Chapter 17 Using Punishment and Response Cost

### I. Types of Time Out

- i. Time Out from Positive Reinforcement
- ii. **Nonexclusionary time-out** (separated but not removed)
- iii. **Exclusionary time-out** (removed)
- iv. Considerations in Using Time-Out
  1. What is the function of the Problem Behavior: time-out is appropriate with problem behaviors that are maintained by positive reinforcement involving social or tangible reinforcers
  2. Is time out practical in the situation (does the physical environment allow for successful use of time-out)
  3. Is time out safe (time out room must be safe)
  4. Is the time-out period Brief
  5. Can escape from timeout be prevented
  6. Can interactions be avoided during time out
  7. Is time out acceptable in the circumstances

### II. Response Cost

- i. Response cost is defined by the removal of a specific amount of a reinforcer contingent on the occurrence of a problematic behavior
- ii. Most effective if response cost is used with DRA or DRO
- iii. Considerations in the use of Response Cost
  1. Which reinforcer will be removed
  2. Is the reinforcer loss immediate or delayed?
  3. Is the reinforcer loss ethical
  4. Is response cost practical and acceptable

## Chapter 18

### Positive Punishment Procedures and the Ethics of Punishment

- I. Positive Punishment procedures (application of an adverse stimulus)
  - a. Overcorrection (engage in effortful behavior for an extended period contingent on an instance of problematic behavior)
    - i. **Positive practice:** engage in correct forms of behavior contingent on an instance of problematic behavior
    - ii. **Restitution:** the client must correct the environmental effects of the problem behavior and restore the environment to a condition better than before the problem behavior
  - b. **Contingent Exercise:** A favorite in military settings. The client is made to engage in some form of physical exercise contingent on an instance of problematic behavior (Drop and give me 20)
  - c. **Guided Compliance:** the person is physically guided through the requested activity (such as an educational task) contingent on the occurrence of the problem behavior.
  - d. **Physical Restraint:** in response to a problematic behavior the change agent holds immobile the parts of the client's body that is involved in the behavior. (Variant of this procedure is Blocking)
  - e. **Cautions in the Application of Aversive Activities**
    - i. Only used when the change agent can provide physical guidance
    - ii. anticipate that the client may resist physical guidance, at least initially, and must be certain that he or she can carry out the procedure if the client does resist physically
    - iii. Certain that physical guidance is not reinforcing to the client
    - iv. Certain that the procedure can be carried out with no harm to the client or the change agent.
- II. Considerations in the use of Positive Punishment
  - a. Use functional nonaversive procedures first (Extinction, Differential reinforcement, Antecedent Manipulation)
  - b. Implement differential reinforcement with punishment
  - c. Consider the function of the problem behavior
  - d. Choose adverse stimulus with care (stimulus is indeed aversive)
  - e. Collect data to make treatment decisions (rapid decrease in problem behavior)

III. Ethics of Punishment

- a. Informed Consent
- b. Alternative Treatments (punishment should not be first choice)
- c. Recipient Safety
- d. Problem Severity
- e. Implementation Guidelines
- f. Training and Supervision
- g. Peer Review
- h. Accountability: Preventing Misuse and Overuse