How to Effectively Use Reinforcement to Increase Academic and Social Behaviors

SPCD 519
Week 8

Three-Term Contingency

Antecedent ($S^a$)  Behavior ($R$)  Consequence ($S^c$)

Contingencies of reinforcement are the relations between behaviors and the environmental events that influence behavior.

Positive Reinforcement

$S^a$  $R$  $S^c^+$

• Positive Reinforcement is the contingent presentation of a stimulus immediately following a response, which strengthens that response.
  • Positive reinforcement strengthens a behavior.

Overview of the three subsections of the Functional Assessment Project

Subsection 1
• Select participant
• Interview and begin observations
• Operationally define target behavior (TB)
• Select dimension of the TB to measure
• Describe the who/what/when/how of your data collection plan
• Develop a sample data summary table and sample graph

Subsection 2
• Operationally define the replacement behavior
• Write the functional assessment summary statement
• Diagram the competing behavior model
• Write the behavior intervention plan with all required components
• Include data summary tables and graph with allbaseline data

Subsection 3
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Positive Reinforcement

A reward is not necessarily a reinforcer.

A reward is an arbitrarily selected item used to recompense performance of a behavior. It does NOT act as a reinforcer unless it increases/sustains the future occurrence of the behavior.

- Primary Reinforcers are unconditioned; they don’t rely on previous learning to acquire reinforcing value.
  - Unconditioned stimuli can be pleasant or aversive.

Secondary Reinforcers are conditioned (learned). They acquire their reinforcing properties by being paired repeatedly and contingently with another stimulus that is already reinforcing.

The function of a behavior is more important for intervention than its form (Cooper et al., 2008).

• Positive Reinforcement is the contingent presentation of a stimulus immediately following a response, which strengthens that response.
  • Positive reinforcement strengthens a behavior.
Effective Selection of Reinforcers

- Match the reinforcer to the individual
  - Consider the individual’s age, social context, preferences, etc.
- Only use external reinforcers when needed and thin them as soon as is feasible or replace with intrinsic, naturally occurring reinforcers
- Monitor reinforcer use and vary them frequently

Negative Reinforcement: e.g., Crying

- The contingent removal of a stimulus immediately following a response, which increases the future probability and/or rate of that response.
  - “Time to get in your crib and go to sleep”

Negative Reinforcement: Screaming

- The contingent removal of a stimulus immediately following a response, which increases the future probability and/or rate of that response.
  - “Write a 1 page story”

Negative Reinforcement: Completing Classwork

- The contingent removal of a stimulus immediately following a response, which increases the future probability and/or rate of that response.
  - “Finish the seat work and I won’t give homework”
**Related Terms**

- **Avoidance** = cases of negative reinforcement in which the individual engages in a behavior to **avoid** or **postpone** an aversive stimulus

- **Escape** = behavior that **removes** or **reduces** an aversive stimulus

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**Negative Reinforcement**

\[
S^D \rightarrow R \rightarrow S^{-r}
\]

Escape and avoidance behaviors are maintained by negative reinforcement. Keep this in mind when teaching a replacement behavior that has the function of escape or avoidance.

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**“Every teacher makes a decision to run a classroom in such a way that students behave appropriately to avoid unpleasantness from the teacher or in such a way that they behave appropriately because the teacher provides many opportunities for positive reinforcement.”**

*(Alberto & Troutman, p. 331, 2003 emphasis added)*

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**Potentially Confusing Concepts:**

- **Negative reinforcement**
  - Removes aversive consequence so that a behavior is **strengthened** (e.g., frequency increases)

- **Punishment**
  - Applies an aversive consequence so that behavior **decreases**

- **Extinction**
  - Discontinuation of reinforcement to **decrease** a behavior
Punishment is the contingent presentation of a stimulus following a response, which decreases the future rate and/or probability of the response.

Extinction is withholding reinforcement for a previously reinforced behavior to reduce the occurrence of the behavior.

Another way to think about it . . .

<table>
<thead>
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<th></th>
<th>Increase Behavior</th>
<th>Decrease Behavior</th>
<th>Add a consequence</th>
<th>Remove a consequence</th>
<th>Discontinue consequence</th>
</tr>
</thead>
<tbody>
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<td>Negative Reinforcement</td>
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<td>Punishment</td>
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