**Reinforcement-based Strategies**

- Differential reinforcement of lower rates of behavior (DRL)
- Differential reinforcement of other behavior (DRO)
- Differential reinforcement of incompatible behavior (DRI)
- Differential reinforcement of alternative behavior (DRA)

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**Behavior Reduction Procedures**

“Any procedures we find offensive for ourselves should not be considered for people with disabilities.” (p. 75, Jackson & Panyan, 2002)

<table>
<thead>
<tr>
<th>Mildly aversive</th>
<th>Moderately aversive</th>
<th>Highly aversive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extinction</td>
<td>Overcorrection</td>
<td>Restraint</td>
</tr>
</tbody>
</table>

**Response Cost**

Removal of a specified amount of a reinforcer contingent on the occurrence of the problem behavior.

- Considered an aversive procedure; often works quickly.
- Often combined with a token system or other approaches, such as differential reinforcement.

**Mildly aversive**

- Time out

**Highly aversive**

- Lemon juice

---

**Removal of Desirable Stimuli**

- Response-cost procedures
- Time-out procedures

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**Removal of Desirable Stimuli: Response Cost**

- Response cost
Example of Response Cost

<table>
<thead>
<tr>
<th>EO</th>
<th>5th</th>
<th>5th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child has 15 minutes of recess on schedule every morning.</td>
<td>Adult says, “Let’s open our books to page 12. Each of you should read the first paragraph to your buddy.”</td>
<td>Child pokes his buddy</td>
</tr>
</tbody>
</table>

Can combine response cost with a group procedure:
If any member of the group engages in the problem behavior, the entire group is fined.

Effective Use of Response Cost

1. Specifically define the target behaviors that will result in response cost, as well as the fines.
2. Establish rules for refusals to comply with the response-cost procedure, and explain these.
3. Greater fines should be associated with more severe forms of problem behavior.
   
   Be cautious of making fines so large that the individual becomes “bankrupt”.

4. Fines should be imposed immediately.
5. Ensure a reinforcement reserve (decrease likelihood of “bankruptcy”).
6. Be prepared for unplanned or unexpected outcomes.
   
   Response cost can reinforce rather than punish undesirable behavior. Individuals can refuse to give up positive reinforcers.
Effective Use of Response Cost

7. Avoid overuse.

8. Keep records to evaluate effectiveness (that is, collect data and use that to make decisions)

Increased aggression may occur
- Ignore emotional outbursts when possible
  - Either don’t use response cost if this is expected, OR
  - Be prepared to ride out the storm

• May see avoidance of the person who administers response cost or the setting may occur
  - This person may become a “conditioned aversive stimulus”

  - Make sure positive reinforcement is available for appropriate behavior to reduce the likelihood of this outcome

• Collateral reductions of desirable behaviors may occur
  - Response cost may unintentionally suppress other, desirable behaviors, as well as the target problem behaviors

• Response cost calls attention to inappropriate behaviors

• Be prepared for unpredictability
Time Out

- Access to varied sources of reinforcement is reduced for a particular time period, contingent on occurrence of problem behavior.
  - Can remove either the individual or the reinforcement.

Example

<table>
<thead>
<tr>
<th>Time Out</th>
<th>EO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child is participating in classroom buddy activities, where attention from peers (a positive reinforcer) is available.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5°</th>
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<tbody>
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<td>Adult says, “Let’s open our books to page 12. Each of you should read the first paragraph to your buddy.”</td>
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</table>

<table>
<thead>
<tr>
<th>5°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult places child in time out (peer attention is removed).</td>
</tr>
</tbody>
</table>

Poking a buddy occurs less often in the future when the teacher gives a classroom instruction and peer buddies are available.

Time Out includes a range of options:

- Nonexclusionary
  1. Planned ignoring
  2. Contingent observation
  3. Timeout ribbon

Time Out includes a range of options (continuum):

1. Exclusionary time out
2. Seclusion/isolation
   - e.g., time out room

NOTE: Timeout in the hallway is NOT recommended – why??
What NOT to do!
Don’t lecture or express a lot of emotion; don’t talk to/lecture, etc. the child once s/he is in time out

Considerations
- Know the function of the problem behavior so you aren’t inadvertently reinforcing it
- Make the time-in environment as rich as possible
- Keep the duration short
  - 1 min per year old
- Clearly communicate ahead of time the conditions that will result in time out
- If you use it, use it consistently
- Be sure you can keep person in the time out area
- Be certain individual is not engaging in an inappropriate behavior when it is time to be released (use contingent delay)

Ethical and Legal Considerations Regarding Seclusionary Time Out
- It is not consistent with intent of IDEA – is not a teaching procedure
- Safety and the student’s best interests
  - Potential of long-term harm to the student
  - Requires INFORMED parental/guardian consent
  - Should only be used with an FBA + a detailed Behavior Intervention Plan
  - Has the potential to become a “habit” for teacher/school (negative reinforcement)
- NM PED Guidelines on Use of Time-Out Rooms as a Behavioral Intervention
- Case law
Punishment Strategies to Decrease Behaviors

<table>
<thead>
<tr>
<th>Level IV</th>
<th>Presentation of Aversive Stimuli</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unconditioned aversive stimuli</td>
</tr>
<tr>
<td></td>
<td>Conditioned aversive stimuli</td>
</tr>
<tr>
<td></td>
<td>Overcorrection procedures</td>
</tr>
</tbody>
</table>

These procedures are often called "positive punishment" because they involve
(1) Applying a stimulus contingent on the problem behavior and
(2) result in a decrease in the future occurrence of the behavior.

Remember:
As a principle of behavior, punishment is not about punishing the person.

Punishment is a contingency that suppresses the future frequency of similar responses.

Punishers, like reinforcers, are not defined by their physical properties, but by their functions.
Punishment Procedures

• Overcorrection
  – Positive practice
  • Engage in correct form of the behavior
  – Negative practice
  • Repeatedly practice the unwanted (problem) behavior
  – Restitution
  • Correct the environmental effects of the problem behavior

• Contingent Exercise

Punishment Procedures

• Guided Compliance
  – Physically guiding persons through a requested activity or response

• Restraint
  – Manual restraint
  • e.g., others hold the individual immobile
  – Mechanical Restraint
  • e.g., use of restraint on elbow to prevent eye gauging
  – Chemical Restraint
  • e.g., use of medications to sedate individual
  – Response Blocking
  • e.g., stop child from biting her hand

• Application of Aversive Stimuli

Relevant Legislation and Federal Policies

• Department of Education
  – Regional Comprehensive Technical Assistance Centers collected data on policies/procedures related to restraint/seclusion (states B/A, DC, territories) (2011)

• Office of Civil Rights: ongoing data collection

• OSEP: SWPBIS

• DHHS: Children’s Health Act
Considerations when Using Punishment

Punishment:
• Is effective (in the sense that it does decrease behaviors)
• Works quickly
• May facilitate adaptive behavior
• May be convenient to the punisher

Side effects:
• Is negatively reinforcing to the punisher so may be used frequently
• Escalates withdrawal
• Suppresses responses; Doesn’t teach individual what to do
• Promotes aggression
• May result in inappropriate stimulus generalization
• Modeling punishment may increase observer’s use of punishment
• May promote lowered self-esteem

Ethical Considerations
• Don’t use procedures that harm individuals.

Right to Safe and Humane Treatment
The first ethical canon and responsibility for any human services program is to do no harm.
• Obtain informed consent from guardian/individual.
• Take data and monitor closely for (a) the individual’s safety, (b) the efficacy of the procedure.
• Provide detailed training to anyone who will administer the procedures and monitor their use carefully.
• Work with a team; keep written records.
• Follow legal guidelines and school policies.

Review: Guiding Principles for Selecting Procedures
• Don’t abandon reinforcement
• Use the least intrusive intervention to get the job done
• Consider the function of the behavior
• Make data-based decisions

Level I: Reinforcement-based strategies
Level II: Extinction
Level III: Removal of desirable stimulus
Level IV: Presentation of aversive stimulus
Coming up...

- Next Week (Week 13)
  - Read Chapters 11 & 12 in your text.
  - Finish discussion of generalization
  - We will do Vocabulary #9 in class, first thing.