Reducing the Value of Escape From Instruction
Objective: Discuss the function of escape-maintained behaviors, including the reflexive MO (CMO-R)

Effective Delivery of Reinforcers for Behaviors to Increase
Objective: Identify key concepts related to the effective delivery of reinforcers

Effectively Increasing Desired Behaviors During Instruction
Objective: Discuss the concepts of stimulus control and transfer of stimulus control

Extinction for Problem Behaviors During Instruction
Objective: Identify procedures for reducing problem behaviors during instruction

Factors To Consider When Teaching Students With Autism
Lack of appropriate communication
Lack of social understanding and awareness
Sleep problems
GI problems
Sensory needs
Factors To Consider When Teaching Students With Autism

- Unusual responses, or lack thereof, to stimuli in the environment
- Over/under generalization
- Unusual fears
- Obsessive adherence to rituals and routines
- Repetitive behaviors

Factors To Consider When Teaching Students With Autism

- Seizures
- Aggression and self-injurious behaviors

What Is Instructional Control?

- High rate of responding with few, if any, problem behaviors
- Willing learner
- Results in best teaching outcomes
Functional Response Classes

1. Problem Behaviors Maintained By Negative Reinforcers
   - Escape/Avoidance

2. Desired Behaviors Maintained By Positive Reinforcers
   - Target Response

3. Problem Behaviors Maintained By Automatic Reinforcers
   - Self-Stim

Hmmm... which one is most valuable?*

No way, I’m Outa Here!!

Reducing the Value of Escape From Instruction

Motivating Operation (MO) (Antecedent) = Value of a reinforcer

\[ \text{MO (Value)} \uparrow = \text{Behavior} \uparrow \]

\[ \text{MO (Value)} \downarrow = \text{Behavior} \downarrow \]
Reducing the Value of Escape From Instruction

- The MO is conditioned when paired repeatedly with certain situations
- The reflexive MO signals that a worsening condition will likely soon occur

Other antecedents + MO = Escape Behaviors = Reinforcer (Escape)

Teacher brings out materials + Value of escape = Crying, Hitting, Screaming = Teacher: “Let’s do something else.”

Reducing the Value of Escape From Instruction

If you can change the MO by changing the student’s environment before problem behaviors occur (antecedent), you can decrease the probability that problem behaviors will occur.

Likewise, if you apply consequences designed to reduce the problem behaviors without reducing the MO, you will not likely see consistent and long-term reduction of the problem behaviors.
Reducing the Value of Escape From Instruction

It is possible to reduce problem behaviors consistently and over a long period of time by implementing only antecedent interventions.

- Antecedents can be implemented even if the problem behaviors are not occurring

It is far less likely to see a reduction of problem behaviors if consequences alone are implemented

- The problem behaviors must occur before consequences can be implemented
- If the problem behaviors occur they can, and likely will, be reinforced

Strategies for Reducing the Value of Escape from Instruction

PACE OF INSTRUCTION

- Should be individualized according to the needs of the learner
- Fast is better, but not to the point of evoking problem behaviors
- Prompt and reinforce shorter latency of response (2 seconds)

PAIRING

- Pair the teacher, teaching materials, table, etc. daily with highly preferred items and activities
- The teaching environment can become an improving condition over time
Strategies for Reducing the Value of Escape from Instruction

FADE IN DEMANDS
• During and after pairing, begin with a few easy tasks, and then gradually increase the frequency and difficulty of tasks
• Prompting can be used (as an antecedent to the response) in order to make a task easier

REDUCE LEARNER ERRORS
• Errorless Teaching
• Prompt before the response occurs, then gradually fade the prompt over subsequent trials
• Prompting after an error may reinforce errors

INTERSPERSE EASY AND DIFFICULT TASKS
• Maintenance (mastered) and Acquisition (not mastered)
• Ratio of maintenance to acquisition should be individualized according to the needs of the learner
• General guideline is more maintenance for early learners and more acquisition as learners become more advanced
Strategies for Reducing the Value of Escape from Instruction

MIX AND VARY TYPES OF TASKS

• Reduces the student’s ability to predict what will happen next
• Helps to ensure generalization
• Keeps instruction “interesting”

Strategies for Reducing the Value of Escape from Instruction

TEACH TO FLUENCY

• Fluent behavior is less effortful
• Short latency
• Increases retention and generalization

Effective Delivery of Reinforcers for Behaviors to Increase
Effective Delivery of Reinforcers (VERMI)

**Value**

**Effort**

**Rate**

**Magnitude**

**Immediacy**

---

**Value/Motivation**

How recently have I assessed my student’s preference for the reinforcers I am offering?

Will my student approach me for the reinforcers, even when I have not given that directive?

Am I offering a variety of reinforcers in order to avoid satiation?

Am I controlling my student’s access to reinforcers?

---

**Protect The Value of Reinforcers**

Collect a variety of reinforcers and continue to do so.

Limit Access - Do not allow non-contingent access to preferred items/activities

Save the most valuable reinforcers for the most difficult instruction

Use least-preferred items/activities for “free time”

Limit contact with reinforcer – Give it “just enough”
Protect The Value of Reinforcers

"My student isn’t motivated for anything. Nothing is valuable."

Example Goal: The student will engage in 5 responses, each followed by the same reinforcer, without problem behaviors, for 4 new reinforcers.

Example Baseline: The student engages in 5 responses for only one reinforcer.

Effective Delivery of Reinforcers (VERMI)

Effort/Contingency

How much effort does the response require?

Should I use some kind of a prompt (before the response) when I present the task in order to make the response easier?

Am I consistently placing some contingency on the delivery of a reinforcer?

Rate/Schedule

Am I delivering reinforcers on a variable intermittent schedule, an average number of responses?

Am I gradually thinning my schedule of reinforcement by increasing the interval?

Am I careful to avoid thinning my schedule too quickly in order to avoid ratio strain?
Effective Delivery of Reinforcers (VERMI)

**Magnitude/Size**

Am I providing a sufficient amount of the reinforcer?

Am I providing sufficient contact with the reinforcer?

---

Effective Delivery of Reinforcers (VERMI)

**Immediacy**

Am I delivering the reinforcer immediately after the response occurs in order to avoid reinforcing a subsequent undesired behavior?

Am I delivering the reinforcer immediately after the response occurs so that the behavior is more likely to be reinforced and, therefore, increased?

---

Effectively Increasing Targeted Behaviors (learning) During Instruction

---
Stimulus Control

Definition: A particular behavior is more likely to occur in the presence of a specific antecedent(s)(evocative effect)

Antecedent → Behavior → Consequence

(SD, Prompt) → Evoked Response → Positive/Negative Reinforcer

Stimulus control when a specific antecedent is present when a behavior is reinforced, repeatedly. That antecedent then becomes an SD, signaling the availability of reinforcement if that behavior occurs. The presence of the SD increases the probability that the behavior will occur.

Transfer of Stimulus Control

Antecedent → Behavior → Consequence

Future SD Prompt → Evoked Response → Reinforcer
(Current SD)

The prompt must have consistent and reliable stimulus control over the response. It must already be in the student’s repertoire of behaviors.

Transfer of Stimulus Control

Antecedent → Behavior → Consequence

New SD Prompt → Evoked Response → Reinforcer

The prompt is faded and now the new SD evokes the same response that was previously controlled only by the prompt. Control has been transferred from the prompt to the new SD.
Transfer of Stimulus Control
Basic tool for teaching
Not just for students with special needs

Prompt Dependency
Failure to fade a prompt effectively results in a response that is "prompt bound".
Learners are not innately "prompt dependent." We teach prompt dependency by introducing prompts and then failing to fade them effectively.
Prompt dependency also occurs when prompts are used when they are not needed.
Choose prompts that will be easier to fade.

Errorless Prompting Procedure

<table>
<thead>
<tr>
<th>Teach (Prompted) Trial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt (no delay)</td>
</tr>
<tr>
<td>Student Response</td>
</tr>
<tr>
<td>Hold up ball and say &quot;What is it?&quot;</td>
</tr>
<tr>
<td>&quot;Ball&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transfer Trial</th>
</tr>
</thead>
<tbody>
<tr>
<td>No prompt or faded prompt</td>
</tr>
<tr>
<td>Student Response</td>
</tr>
<tr>
<td>Hold up ball and say &quot;What is it?&quot;</td>
</tr>
<tr>
<td>&quot;Ball&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Trial</th>
</tr>
</thead>
<tbody>
<tr>
<td>No prompt or faded prompt</td>
</tr>
<tr>
<td>Student Response</td>
</tr>
<tr>
<td>Hold up ball and say &quot;What is it?&quot;</td>
</tr>
<tr>
<td>&quot;Ball&quot;</td>
</tr>
</tbody>
</table>

Several Distractor Trials (easy maintenance targets)

<table>
<thead>
<tr>
<th>Distractor Trial</th>
</tr>
</thead>
<tbody>
<tr>
<td>No prompt or faded prompt</td>
</tr>
<tr>
<td>Student Response</td>
</tr>
<tr>
<td>Hold up ball and say &quot;No, it's not...&quot;</td>
</tr>
<tr>
<td>&quot;Ball&quot;</td>
</tr>
</tbody>
</table>
Error Correction

- Errorless teaching involves precluding errors, but we will occasionally see errors.
- When errors occur, we perform error correction:
  - Reduces future frequency of errors
  - Errors produce worsening condition (error correction procedure is effortful; delays reinforcement)
  - Involves same teach, transfer, independent trial structure as errorless teaching procedure
  - Reduces future probability of error
  - Increases future probability of correct response

Types of Errors

The following are examples of errors, all of which require error correction:

- Incorrect response
- No response
- Correct response accompanied by problem behaviors
- Delayed response (more than 2-3 seconds)
- Correct response either followed by or preceded by an incorrect response

Errors

- Errors are more likely to occur when prompts are faded too quickly
- High rates of learner errors
  - Increase probability of problem behaviors
  - Increase future probability of errors
- If errors are occurring at high rates, it may be necessary to measure errors
### Error Correction Procedure

<table>
<thead>
<tr>
<th>ERROR:</th>
<th>Prompt (no delay)</th>
<th>Student Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold up ball and say, &quot;What is it?&quot;</td>
<td>&quot;Car&quot;</td>
<td></td>
</tr>
</tbody>
</table>

**Teach (Prompted) Trial**

<table>
<thead>
<tr>
<th>Prompt (no delay)</th>
<th>Student Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold up ball and say, &quot;What is it?&quot;</td>
<td>&quot;Ball&quot;</td>
</tr>
</tbody>
</table>

**Transfer Trial**

<table>
<thead>
<tr>
<th>No prompt or faded prompt</th>
<th>Student Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold up ball and say, &quot;What is it?&quot;</td>
<td>&quot;Cat&quot;</td>
</tr>
</tbody>
</table>

**Distractor Trials**

<table>
<thead>
<tr>
<th>No prompt or faded prompt</th>
<th>Student Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold up ball and say, &quot;What is it?&quot;</td>
<td>&quot;Dog&quot;</td>
</tr>
</tbody>
</table>

**Independent Trial**

<table>
<thead>
<tr>
<th>No prompt or faded prompt</th>
<th>Student Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold up ball and say, &quot;What is it?&quot;</td>
<td>&quot;Car&quot;</td>
</tr>
</tbody>
</table>

**Skills to Teach**

- How would you prompt the following skills?
  - Label ball
  - Select a picture of a dog in discrimination with two other pictures when told, "Give me dog."
  - Say "bed" when asked, "Where do you sleep?"
  - Say "two" when asked, "What is one plus one?"
Skills to Teach cont’d

- Brush teeth
- Request a cookie (non-vocal learner)
- Hang up backpack
- Recite the Pledge of Allegiance

Extinction for Problem Behaviors During Instruction

Extinction is the discontinuing of reinforcement of a previously reinforced behavior resulting in reduction of the behavior.

Example:
Reinforcing Contingency = Mary hits the snooze button and alarm turns off.

Alarm sounds at 6:00 a.m. Mary hits the snooze button. Alarm continues to sound.

The next morning, Alarm sounds at 6:00 a.m. Mary hits the snooze button. Alarm continues to sound.

The following morning Alarm sounds at 6:00 a.m. Mary hits the snooze button. Alarm continues to sound.

The future frequency of Mary hitting the snooze button is decreased.
Extinction for Problem Behaviors

A procedure is not extinction unless it produces a reduction of the behavior.

Measurement of the behavior must take place in order to demonstrate whether or not the behavior is decreasing.

Duration of episodes of problem behaviors

Extinction Burst

An extinction burst is an increase in the frequency, intensity and variety of responding when an extinction procedure is initially implemented.

Example:

Reinforcing Contingency = Mary hits the snooze button and alarm turns off.

Alarm sounds at 6:00 a.m. → Mary hits the snooze button. → Alarm continues to sound.

Alarm continues to sound. → Mary hits the snooze button harder. → Alarm continues to sound.

Alarm continues to sound. → Mary hits the snooze button ten times in a row. → Alarm continues to sound.

Alarm continues to sound. → Mary yells obscenities at the alarm. → Alarm continues to sound.

The future frequency of Mary hitting the snooze button is decreased.

Extinction Burst

If a behavior is reinforced during an extinction burst, it may be more severe the next time it occurs.

Therefore, it is very important to plan an extinction procedure very carefully and train all individuals who will implement it, before beginning the procedure.
ABOUT EXTINCTION

It is highly unlikely that anyone is able to control 100% of environmental variables 100% of the time. Therefore, it is extremely difficult, if not impossible, when implementing an extinction procedure to ensure that the problem behavior is not reinforced in any way at all.

Therefore, extinction alone is not likely to produce long-term reduction of problem behaviors.

ABOUT EXTINCTION

In other words, if extinction is applied without accompanying antecedent interventions designed to reduce the value of the reinforcer, consistent long-term reduction of the problem behaviors is unlikely to occur.

ABOUT EXTINCTION

Behaviors that have been intermittently reinforced over a long period of time are the behaviors that are most resistant to extinction and, therefore, take longer to reduce consistently over time.
ABOUT EXTINCTION

Dangerous Behaviors (Aggression and Self-Injury)

Safety first and foremost-(includes the student and the individuals implementing the behavior plan)

Consult a professional (BCBA)

Avoid physical restraint if at all possible!!

---

Strategies Extinction for Problem Behaviors

If a behavior produces a change in the environment, that change may reinforce the behavior. Therefore, the most reliable way to produce extinction is to make sure that there is no change in the environment when the behavior occurs.

Sound impossible? You're right!

Damage control

Antecedent Interventions

---

Strategies Extinction for Problem Behaviors

2 basic procedures for applying extinction of problem behaviors during instruction.

Nagging

Repeating the direction every 5 to 20 seconds until the student complies. May be accompanied by lightly tapping the arm or shoulder.

Calm tone and volume of voice- no anger!

No corrective feedback while nagging

No negotiating

Do not bring out preferred items

Do not remind them what they are working for

No “first/then”

Block attempts to leave, but do not restrain
Strategies Extinction for Problem Behaviors

2 basic procedures for applying extinction of problem behaviors during instruction.

Planned Ignoring
Do not change your behavior in any way, except to orient your face and body away from the student.

- No corrective feedback
- No negotiating
- Do not bring out preferred items
- Do not remind them what they are working for
- No “first/then”
- Block attempts to leave, but do not restrain

When the problem behaviors stop, wait 3 to 5 seconds, then present some easy trials. If problem behaviors do not return, continue the original situation that evoked the problem behaviors (instruction, requesting opportunity, etc.)

If the problem behaviors return, go back to the extinction procedure.

Planned ignoring is usually appropriate when the function is access to items/activities.

Nagging is usually appropriate when the function is escape from instruction.

Error Correction

Gail Wayman, BCBA
The Wayman Center
4225 W. Parker Rd.
Plano, TX 75093
972-212-6504
TheWaymanCenter.com
Gail@TheWaymanCenter.com