Selecting Function-Based Treatments for Socially Maintained Problem Behavior

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Today I will describe …

- Common function-based treatments for problem behavior
- Decision-making guidelines for selecting treatments for problem behavior maintained by:
  - Social positive reinforcement (e.g., attention)
  - Social negative reinforcement (e.g., escape from instruction)

Causes (functions) of Problem Behavior

Reinforcement Functions

- Attention from others (teachers, peers)
- Access to tangible items (toys, materials) & activities
- Escape from or avoidance of:
  - Instruction/work
  - Social interaction
  - Noise/crowding
  - Self-stimulation*
  - Relief from pain or discomfort*

Iwata et al. (1994)

- 152 children with developmental disabilities
- Self-injurious behavior

Hanley et al. (2003)

- Approx. 500 individuals with developmental disabilities
- Self-injurious behavior, aggression, disruption, etc.

3.02 Functional Assessment.

(a) The behavior analyst conducts a functional assessment, as defined below, to provide the necessary data to develop an effective behavior change program.

(b) Functional assessment includes a variety of systematic information-gathering activities regarding factors influencing the occurrence of a behavior (e.g., antecedents, consequences, setting events, or motivating operations) including interview, direct observation, and experimental analysis.
Barriers

Decision-Making Guidelines

- Graduate students are taught how to implement procedures
- Practitioners also need to know when to select them
- Some guidance is available from empirical-article discussion sections
- Most literature reviews and texts focus on “how” and not “when”
Treatments for Attention-Maintained Problem Behavior: Empirical Support and Clinical Recommendations

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Function-Based Treatments for Escape-Maintained Problem Behavior: A Treatment-Selection Model for Practicing Behavior Analysts

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ABSTRACT

Escape from instructional activities is a common maintaining variable for problem behavior and a number of effective treatments have been developed for this function. Each of these treatments has characteristics that make them optimal for certain environments and clients, but less optimal for others. We summarize the more commonly researched function-based treatments for escape-maintained behaviors, describe the contexts for which they are most appropriate, and provide a clinical model for selecting treatments based on client characteristics and the constraints of the therapeutic environment.

Keywords: Activity choice, clinical decision making, curricular revision, demand fading, differential reinforcement, escape, extinction, function-based treatment, noncontingent reinforcement

Problem Behavior → Functional Assessment → Escape from Work

1. Curricular/Instructional Revision
2. Demand Fading
3. Extinction
4. Noncontingent Escape
5. Activity Choice
6. DNRA / FCT
7. DNRO

Guiding Values

- Quality of life
- Safety
- Suitability given available resources
- Current client strengths
- Prioritization of skill needs and educational opportunities

Function-based Interventions for Escape Functions

<table>
<thead>
<tr>
<th>Teach the client the behavior no longer “works”</th>
<th>Reduce the client’s motivation to obtain the reinforcer</th>
<th>Teach the client a different way to obtain the reinforcer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extinction</td>
<td>Curricular Revision</td>
<td>Functional Communication Training</td>
</tr>
<tr>
<td>Differential Reinforcement of Zero Rates</td>
<td>Demand Fading</td>
<td>Differential Reinforcement of Alternative Behavior</td>
</tr>
<tr>
<td>Noncontingent Escape</td>
<td>Activity Choice</td>
<td></td>
</tr>
</tbody>
</table>
Curricular & Instructional Revision

- Curricular Revision
  - Is task too difficult?
  - Too easy/boring?
  - Is it meaningful for the future?
  - Missing prerequisites?

- Instructional Revision
  - Is pace too fast/slow?
  - Is error rate too high?
  - Prompts?
  - Enough reinforcement?
  - Different response format?
  - Does everyone teach the same way?
Demand Fading & Noncontingent Escape

- **Demand Fading**
  - Eliminate demands
  - Slowly fade demands back in
  - Immediate reduction
  - Increases tolerance to demands
  - Schedule thinning
  - Can use without extinction ***

- **Noncontingent Escape**
  - Scheduled breaks
  - NO response requirement
  - Immediate reduction
  - Labor intensive at first
  - Schedule thinning
  - Can use without extinction ***
Activity Choice
- Incorporate choice into activity
  - Which of similar materials?
  - Which color?
  - Which one first?
- Antecedent intervention
  - No programmed consequence for problem behavior (extinction possible)
- No missed instruction time

Extinction
- Maintain instruction … no visible change
  - Difficult & unpleasant … but possible
- Does not address the motivating operation!
- Extinction bursts possible

Most Important Goals
- Which prosocial behavior should you target?
  - Communication = FCT (ask for break)
  - Other skills = DRA (earn breaks by learning)
  - Tolerance = DNRO (earn breaks by tolerating something unpleasant for longer and longer)
- Schedule thinning
Group Activity #1

Problem Behavior → Functional Assessment → Attention

1. Extinction
2. Noncontingent Attention
3. Functional Communication Training
4. Differential Reinforcement of Alternative Behavior
5. Others (e.g., Peer-Mediated Interventions)

Noncontingent Attention

- Scheduled attention
- FT, VT, informal
- NO response requirement
- Immediate reduction
- Labor intensive at first
- Schedule thinning
- Can use without extinction ***
For Classrooms …

- **Class Wide Peer Tutoring**
  - Pair students up
  - 1 teaches, 1 learns
  - Feedback + attention
  - Benefits all students

- **Environmental Restructuring**
  - Change schedule
  - Change physical location
  - Etc.

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**Noncontingent attention for the treatment of excessive medical complaints in a medically fragile man with mental retardation**

Louis P. Hagopian*, Linda A. LeBlanc**, Kristen A. Maglieri***

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**Extinction**

- Withhold all attention following behavior
- Does not address the motivating operation!
- Extinction bursts possible
- Consider ethicality, practicality, and feasibility
Is the problem behavior safe and ethical to ignore?
Are extinction bursts tolerable?
Does appropriate behavior need strengthening?

**FBA identifies attention-maintained problem behavior**
- No
- Yes

**Common classroom behaviors**
- DRA (earn attention/praise with prosocial behavior)
  - Academics
  - Waiting
  - Social Behavior

**Most Important Goals**
- Communication = FCT (ask for interaction)
- Other skills = DRA (earn attention/praise with prosocial behavior)
  - Academics
  - Waiting
  - Social Behavior

**Group Activity #2**

**Concluding Comments**
- These algorithms are a starting point
  - Revise based on experience and setting
- These algorithms can be empirically evaluated
- New algorithms are needed
  - Consider developing & sharing!