Understanding and Managing Challenging Behavior in the Classroom

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What is a problem behavior?

- Harmful to a person
  - The individual or other people

- Interferes with normal interactions
  - Prevents inclusion in programs
  - Hinders social relationships

- Interferes with appropriate behavior
  - Prevents skill development
  - Poses a barrier to achievement

Common Forms of Problem Behavior

- Aggression (hitting, kicking, biting others, etc.)
- Tantrums (crying, yelling, spitting)
- Property Destruction (throwing materials, breaking things)
- Noncompliance (refusal to following instructions, flopping)
- Elopement (running away)
- Self-Injurious Behavior (head hitting, biting self, hand mouthing)
- Stereotypy (hand flapping, body rocking, spinning objects)
- Pica (eating inedible objects)
Why Does it Happen?

- Most problem behaviors are learned
  - Appropriate & problem behavior can occur for similar reasons
- It’s a way to communicate
  - It gets the individual something that is desired
- Influenced by things happening in the immediate environment
  - Antecedents: before behavior (“triggers”)
  - Consequences: after behavior (“pay off”)
- Understanding problem behavior
  - Know the “triggers” and “pay offs”
  - Or, in other words, determine the “function” of the behavior

The Role of Other People

- These “triggers” and “pay offs” often involve the behavior of other people
- Things we do can change the likelihood of problem behavior occurring
  - Example: Saying “no” following a request
- Things we do can keep problem behavior going in the future
  - Example: Giving things to the person to calm him/her down

This means that we need to change our own behavior too!!!!

Understanding Behavior

**Antecedent → Behavior → Consequence**

**Antecedents (“Triggers”):**

- Occur immediately before a behavior
- Impact the frequency and intensity of behavior

Examples:

- Little or no attention from others
- Something taken away or not available
- Asked to do something
Understanding Behavior

Antecedent → Behavior → Consequence

Consequences ("Pay off"):
- Occur immediately after a behavior
- What the behavior “gets them” - reaction, items, etc.
- Makes behavior more likely to occur again in the future

Examples:
- Attention
- Access to desired objects
- Escape or avoid tasks

Main Functions of Problem Behavior

Attention

People are quick to learn that engaging in problem behavior can get them lots of attention.

Any form of attention can be desirable - even stern looks, reprimands, and restraint.

“There’s no such thing as bad press.”

Main Functions of Problem Behavior

Tangibles

Problem behavior can get them access to things they want (e.g., leisure materials, food), particularly things that have been restricted or denied ("5 more minutes!")
Case Illustrations

John is an 11-year-old boy with a language disability. He has few friends and is heavily dependent on attention from his teacher. John has learned that one means of getting attention from this teacher is to disrupt the class by running around and screaming.

Sue is a 15-year-old teen with mild mental retardation. Her favorite activity is watching television but her mother only permits her to watch television for 30-minutes each day. Sue has learned that her mother often will “give in” and allow her to watch additional television if she screams and drops the floor.

Main Functions of Problem Behavior

Escape or avoid things they don’t like

People are quick to realize that misbehavior will result in getting them out of things they don’t like

This may happen when a person is placed at a desk with work, asked to help with chores, is told it’s time for a bath or bed, or is in the presence of aversive events (loud environments, close proximity to others, etc.)
Case Illustrations

Earl is a 10-year-old student with a learning disability. He has a great deal of difficulty with individual seat work. Earl has learned that his teacher will remove his work if he yells and bangs his hand on the desk.

Valerie, a 6-year-old, prefers to play alone and does not like other students to approach her on the playground. She has learned that other students will stay away from her if she bites the students whenever they approach her. The teacher also quickly moves other students away from her when she threatens to bite.

Main Functions of Problem Behavior

Sensory Stimulation

The consequences are not provided by anyone else (person engages in the behavior when alone)

- Access to pleasurable stimulation (e.g. rocking)
- Escape from aversive stimulation

Case Illustrations

Bob is a 4-year-old student with severe Autism. He rarely plays with toys and does not enjoy interacting with others. He has learned that flapping his hands in front of his eyes and body rocking produce pleasurable stimulation.

Charles is a 5-year-old student with a profound language disability. He has suffered from chronic ear infections for several years. He has learned that hitting his ear with his fist will sometimes lessen the pain in his ear.
How Do We Identify Function?

“Functional Behavioral Assessment” (FBA)

Any formal method used to identify antecedents and consequences that are related to a particular behavior

In other words, when and why does it occur?

How to Identify Function

- Indirect assessment
  - Interviews, checklists, questionnaires, etc.
  - Often inaccurate or incomplete information
- Descriptive assessment
  - Watch and record what happens normally
  - Identifies important events around behavior
- Functional analysis
  - Arrange “situations” to see when most problem behavior occurs
  - “Gold standard” in behavioral assessment
  - Requires training to do this safely & correctly

A Brief Overview of The Assessment Process

Step 1: Problem Definition
1. Begin with general description of problem (e.g., does not follow directions, is hyperactive, is aggressive towards others)
   
   Example: Bob is aggressive towards peers and teachers.

2. Develop "operational definitions" so that everyone understands what is an instance of the behavior
   
   Example: Bob strikes, kicks, scratches, and grabs clothing of peers and teachers. He also makes verbal threats of violence (e.g., "I'm going to break your arm").
Step 2: Indirect Assessment: **Verbal** report from teachers/caregivers about the behavior and the conditions under which it occurs.

- To clarify the nature of the problem
- To obtain information that will guide additional assessments

  Use a **structured** format: improves consistency
  Examples: Questionnaires, Checklists, Rating Scales

  Obtain information from several people who are knowledgeable about the person (teachers, parents,

What Does the Research Say About Indirect Assessment?

- Moderate to low reliability and validity
- Not adequate to identify behavioral function

Generates useful information to guide additional assessment:
  - When, Where, and What to observe

Step 3: Descriptive Assessment: Direct **observation** of the behavior and events that immediately precede and follow it

Helps us:
- Gather information/data through direct observation
- See patterns/commonalities
- Develop hypotheses about the function of the behavior
### Narrative A-B-C Recording

You simply write down events as they occur.

- **What happened right BEFORE the behavior?**
  - Was the individual being ignored?
  - Was something denied?
  - Was the individual told to do something?

- **What happened right AFTER the behavior?**
  - Was the individual given attention?
  - Did the individual receive something such as food or a toy?
  - Was a request or demand removed?

- Focus on immediate antecedents and consequences (occur within 10 seconds of the behavior)

### Narrative A-B-C (Antecedent - Behavior - Consequence) Assessment

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Behavior</th>
<th>Consequence</th>
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<tbody>
<tr>
<td>Hand-biting - placing any part of the hand past the plane of the lips</td>
<td>Elopement - attempting to leave designated area without permission or authorization</td>
<td>Immediate consequence: Immediate antecedent Behaviors (Any modifications to the environment or management strategies)</td>
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Interpreting the Results

- Look for a pattern
  - Common antecedents?
  - Common consequences?

- Determine the possible function
  - May not always be the same across behaviors and situations

- Narrative recording is “free form” and can be difficult to use and interpret

Structured A-B-C Recording

- Potential antecedents/consequences are listed on data sheet
- When the behavior occurs, mark the antecedent, behavior, and consequence from listed options
- Collect data repeatedly over time in all relevant settings and at times the behavior is likely to occur
- Summarize data to develop hypotheses about function
Parents also might want to use a structured form. We should develop one for home use. I have examples.
lerman, 2/14/2010
Structured A-B-C (Antecedent – Behavior – Consequence) Assessment

Immediate antecedent:
- Hand-biting – placing any part of the hand past the plane of the lips
- Elopement – attempting to leave designated area without permission or supervision

Immediate consequence:
- None
- Provoked by classmate

What does the research say about descriptive assessment?
- More objective than indirect assessment
- Correlation does not always mean causation!
- Can be difficult to interpret data
- Results often unclear

What if ………?
- A-B-C data are unclear (no consistent antecedents & consequences)
- A-B-C data are clear but treatment is ineffective

Possible next step……..

Step 4: Conduct an Experimental (Functional) Analysis
- Directly manipulate potential antecedents & consequences
- Levels of behavior under one or more “test” conditions are compared to those under a “control” condition
- Originally developed by Brian Iwata as a way to assess self-injurious behavior in adults with developmental disabilities….
### Functional Analysis

<table>
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<tr>
<th>Condition</th>
<th>Antec.</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Attention&quot; Test for Positive Reinforcement</td>
<td>Adult present; but ignores individual</td>
<td>Adult delivered statement or concern or verbal reprimand</td>
</tr>
<tr>
<td>&quot;Demand&quot; Test for Negative Reinforcement</td>
<td>Adult present; work materials present; adult delivers instructions</td>
<td>Adult removes instructions and materials</td>
</tr>
<tr>
<td>&quot;Alone&quot; Test for Automatic Reinforcement</td>
<td>Adult absent; leisure materials absent</td>
<td>None</td>
</tr>
<tr>
<td>&quot;Play&quot; Control Condition</td>
<td>Adult present; leisure materials present; no instructions; continuous attention</td>
<td>None</td>
</tr>
</tbody>
</table>

### Now We Know the Function

**Next Step: Function-Based Intervention!**
Two **Important** Intervention Components

**Component #1:** How to respond to problem behavior so that the maintaining consequence(s) are withheld

Antecedent → Problem Behavior → Consequence

**Component #2:** How to teach and maintain an **alternative** (replacement) behavior

Antecedent → Problem Behavior → Consequence

Replacement Behavior → Consequence

Developing Function-Based Behavior Intervention Plans

**Function:** **Attention or Tangibles**

**#1: Remove the Consequence**

**Planned Ignoring (Extinction)**

- Withhold attention and tangibles for at least 1 minute after the problem behavior has occurred.
- When problem behavior occurs, do not attend to it. Do not provide access to preferred items in an effort to redirect the individual.
- If problem behavior occurs while interacting with the individual, walk away; do not provide any **verbal** attention.
  - Block or prevent dangerous behavior in a neutral manner if necessary.

**#2: Teach An Alternative (Replacement) Behavior**

Select a Replacement Behavior That:

- The individual **already knows** how to do (more efficient than teaching a new behavior?)
- Can be easily identified by others (e.g., communication)
- Will naturally produce the consequence that was maintaining problem behavior (How do other people gain access to this reinforcer? By asking for it? By manipulating the environment in some way, such as opening a toy box to get a toy?)
- **Is easier** to exhibit than challenging behavior
Developing Function-Based Behavior Intervention Plans

Function: **Attention or Tangibles**

#2: Teach An Alternative (Replacement) Behavior

Teaching the Replacement Behavior:

- Develop a plan for teaching the replacement behavior during instructional sessions and **throughout** the day
- Use prompts and reinforcement to teach the behavior
- Develop a plan for maintaining the behavior

Function: **Attention or Tangibles**

Teaching the Replacement Behavior

Set up for Practice (Antecedent)

- Wait 5-10 Seconds
  - Yes
    - Provide Consequence
    - Model or Physically Guide to do Response
    - Individual does behavior with assistance
    - Provide Consequence
  - No
    - Provide Consequence

Function: **Attention**

Example

- Get on the phone
- Wait 5-10 Seconds
  - Tapped you on the shoulder
    - Provide Attention
  - Did not tap you on the shoulder
    - Take child's hand and show him or her how to tap your shoulder
    - Provide Attention
Developing Function-Based Behavior Intervention Plans

Function: Tangibles

Example

Place cookie for your learner to see
Wait 5-10 Seconds
Says approximation to cookie
Give cookie and praise

Does not say anything
Direct your learner to
“Say Cookie”
Learner says “cookie”
Give cookie and praise

Developing Function-Based Behavior Intervention Plans

Function: Escape

#1: Remove the Consequence

“Escape Extinction”
- Do not permit the individual to escape the task/activity/instruction when problem behavior occurs
- Use a three-step prompt sequence to keep the individual on task:
  1. TELL what to do:
     - Give clear instruction
  2. SHOW what to do:
     - Model the exact response OR provide gestures that indicate what you want (e.g., point to chair)
     - Restore environment; Say, “now you do it.”
  3. HELP do it:
     - Take the individual hand-over-hand through entire response and say, “you need to _______.

Developing Function-Based Behavior Intervention Plans

Function: Escape

#2: Teach An Alternative (Replacement) Behavior

Potential Replacement Behaviors:
- Compliance to an instruction
- On-task behavior
- A known form of communication

Will lead to escape or a brief break
Function: Escape

#2: Teach An Alternative (Replacement) Behavior

Teaching the Replacement Behavior:
- Develop a plan for teaching the replacement behavior during relevant situations (when the individual will be motivated to escape or get a break)
- Use prompts and reinforcement to teach the behavior
- Develop a plan for maintaining the behavior

Example:
- Say, “Clean up the blocks”
- After 5 seconds of following instruction
- Child gives you “break” card
- Provide a break
- Did not give you “break” card
- Take child’s hand and physically guide her to hand you card
- Provide break

Other Potential Strategies
- Provide rewards for on-task behavior or instruction-following:
  - Break from task
  - Social: praise, hugs, tickles, high-5
  - Material: toy, edible, favorite activity
- Intersperse easy or preferred tasks with aversive or difficult ones
- Permit individual to choose tasks or activities
Function: Sensory Stimulation

1. **Prevent** or attenuate the sensory consequences of the behavior

   Must identify the potential consequence!

   - Does the behavior produce any observable changes in the environment (e.g., banging objects)?
     - Alter physical environment so that behavior no longer produces the outcome (e.g., cover objects so that they do not make noise).
   - Is the behavior limited to body manipulation (e.g., self-injury, stereotypic movements)?
     - Consider possible adaptive clothing or devices that minimize stimulation produced by the behavior.

Function: Sensory Stimulation

2. **Teach** an Alternative (Replacement) Behavior

   - Identify strong positive reinforcers (rewards)
   - Teach a behavior that is incompatible with problem behavior (e.g., manipulating leisure materials)
   - Rotate rewards/activities often and encourage engagement

Effective Interventions

- **Require correct** implementation
  Everyone must know how to follow the plan exactly

- **Require consistent** implementation
  Everyone must follow the plan every time
Potential Issues

- Sometimes behavior gets worse before better!
  - Keep track so you can see progress over time
    (More on this in a moment)
- More effortful to do procedure than to give in
  - Remember importance of consistency!
- Might be difficult to implement in some settings
  - Plan ahead to prevent problems
- Our behavior is also influenced by consequences
  - Reinforcing problem behavior makes it stop now
    Good news now, bad news later… It is a vicious cycle!

Now We Have Designed Our Function-Based Intervention

Next Step: Measure and Evaluate!

A Good Measurement System Is….

(1) **Objective**: Observable, quantifiable, clearly defined behavior
(2) **Reliable**: Consistent (across time, users)
(3) **Accurate/Valid**: Provides true representation of behavior & events
(4) **Sensitive**: Captures changes in behavior
Identify Best Dimension of Behavior to Measure

- **Count/Frequency**: # of times behavior occurs
- **Duration/speed**: Amount of time consumed by behavior
- **Latency**: Time elapsed to onset of behavior from some starting point
- **Interresponse time (IRT)**: Amount of time between episodes of behavior
- **Errors**: Correctness of behavior
- **Topography**: Form of behavior
- **Strength/intensity**: Force of behavior

Choose Your Recording Method and Create Data Sheet

1) **Continuous**: Behavior observed & recorded throughout school day or period using either:
   (a) **Event recording (frequency, rate)**
       Count each instance of behavior
   (b) **Timing (duration, latency, IRT)**
       Count passage of second, minute, or hour from one point to another

Best for:
- Low frequency behavior
- Behavior with clear on-set/off-set

Instructions: Throughout the day whenever V.M. has an outburst of aggression or raises his hand, make a tally on the data sheet.

**Aggression**: Any instance where V.M. physically hits or attempts to hit, kick, slap, punch, bite, or high force pinch another person, including students or staff. This may also be in the form of an object being used to hit another person.

**Hand Raise**: Any instance where V.M raises his hand above shoulder level.

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<thead>
<tr>
<th>Date</th>
<th>Example</th>
<th>Group Work</th>
<th>Individual Work</th>
<th>Trans.</th>
<th>Other</th>
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<tbody>
<tr>
<td></td>
<td>Tally Mark</td>
<td>III</td>
<td>II</td>
<td>III</td>
<td>III</td>
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<td>Aggression</td>
<td>Hand Raise</td>
<td>Activity</td>
<td>Class Work</td>
<td>Transition</td>
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<tr>
<td>Time</td>
<td>Disruption Duration</td>
<td>Freq Aggression</td>
<td>Freq Assignments Completed</td>
<td>Freq Card Exchange</td>
<td>Freq Reinforcers Earned</td>
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<td></td>
</tr>
<tr>
<td>9:16-9:30</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

2) Time Sampling (Discontinuous Recording)
Provides an estimate of duration or occurrence

- Divide school day or period into smaller intervals (e.g., 5 minutes, 10 minutes)
- Record presence/absence of behavior during interval
- Determine % of intervals scored

The smaller the interval, the more accurate the data!

Time Sampling Methods

- Whole-interval recording
  Score if behavior during ENTIRE interval
  Underestimates: Use for behavior increase

- Partial-interval recording
  Score if behavior during ANY PORTION of interval
  Overestimates: Use for behavior decrease

- Momentary time sampling (MTS)
  Scored if behavior AT END (or beginning) of interval
  Random error (does not consistently over- or underestim)
  Just as accurate as WIR and PIR but easier!!!! (exception: not recommended for low-frequency, short duration behavior)
Do I have to Collect Data All Day?!?!?

- Use shorter observation periods for frequent behavior
- Consider where and when behavior is most likely to occur (or should occur)
- Select a circumscribed period/setting to evaluate intervention initially
Using Your Data to Evaluate and Monitor Progress

Don’t forget Baseline!
- Collect data on behavior before you introduce the behavior plan
- Gives you a point of comparison once you begin

Introduce Intervention
- Continue to collect data
- Use same measurement as baseline
- Graph and compare

---

Graphs

Visual display of performance over time

Benefits:
- Helps with interpretation of data
- Permits ongoing monitoring of behavior
- Allows intervention changes to be made quickly
- Provides feedback to behavior

---

Elements of a Simple Line Graph

![Graph Example]

- Baseline
- Communication Training

<table>
<thead>
<tr>
<th>Days</th>
<th>1/0</th>
<th>1/2</th>
<th>1/4</th>
<th>1/6</th>
<th>1/8</th>
<th>1/10</th>
<th>1/12</th>
<th>1/14</th>
<th>1/16</th>
<th>1/18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Number of Requests

- 0
- 5
- 10
- 15
- 20
- 25
- 30
- 35
- 40
Importance of Continuous Evaluation
Benefits of Graphs!

Thank you!
lerman@uhcl.edu

QUESTIONS?