AN ABA APPROACH TO TEACHING THE DIFFICULT CHILD

By: Lindsay Rice and Stephanie Beaulieu
Overview

• Defining the behavior
• Data collection and how to begin this process
• “The why”: Why is this behavior occurring
  • Determining the functions of behavior
  • Replacement behaviors
  • Reinforce appropriate behaviors versus punish inappropriate behaviors
• Then what...The Behavior Plan
Defining the Behavior

• What does the behavior look like?
  • Describe it...be specific
    • Can a stranger replicate the behavior by reading your definition?
    • Act it out
    • Be as specific as possible
Data Collection

• Now that you know what the behavior looks like, it’s time to start collecting data
  • ABC Data
  • Frequency
  • Duration
  • Severity

• Write up a narrative of what you see in “today’s” eyes for each behavior you want to change. Include the above information to ensure you are as specific as possible.
3-Term Contingency—ABC

The three term contingency is the basic unit of analysis in the analysis of operant behavior:

- **Antecedent** - what comes before a specific behavior
- **Behavior** – the behavior itself
- **Consequence** – what happens immediately after the behavior

- This analysis helps to pinpoint what may trigger a behavior and assists in identifying what consequences keep a behavior going.
<table>
<thead>
<tr>
<th>A (Antecedent)</th>
<th>B (Behavior)</th>
<th>C (Consequence)</th>
<th>Possible Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mom on phone (low attn)</td>
<td>Angel hits sister</td>
<td>Mom gets off the phone and scolds Angel</td>
<td>?</td>
</tr>
<tr>
<td>Teacher instructs Janie to write her name</td>
<td>Janie scratches teacher and throws the pencil</td>
<td>Teacher sends Janie to time-out</td>
<td>?</td>
</tr>
<tr>
<td>Teacher instructs student to wait for juice</td>
<td>Student hits his head</td>
<td>Teacher immediately provides the juice box</td>
<td>?</td>
</tr>
</tbody>
</table>
Function versus Topography

• Function—What purpose is the behavior serving?
  • Function is important in determining an intervention for the behavior.

• Topography—What does the behavior look like (form)?
  • Topography is important in defining the behavior so that it is countable and measurable.

• Behaviors that look different may serve the same function
  • Hitting, screaming, and biting to access attention

• Behaviors that look the same may serve different functions
  • Hitting with a closed fist maintained by attention
  • Slapping with an open palm maintained by escape from demands
Functions of Behavior

• There is a reason why the individual is engaging in the behavior:

1. **Attention** – gain attention from another individual
2. **Tangible** – gain access to object, food, toy, etc...
3. **Escape/Avoidance** – get out of something such as a task or demand
4. **Sensory/Non-social** (Automatic) - refers to situations in which behavior is maintained independent of the social environment
5. **Medical/Physical** - Seek medical attention if function is unknown
Attention

• **Antecedent** – Mom is talking to dad. Johnny looks at parents talking, walk over to sister and hits her.

• **Behavior** – Johnny hitting his sister

• **Consequence** – Mom discontinues conversation with dad to run over to Johnny to scold him for hitting his sister
Tangible

• Antecedent - Bobby is in class and sees a box of cookies he really likes.
• Behavior - He screams because he cannot have the cookies.
• Consequence – The instructor tries to ignore it, but as the screaming gets louder she gives Bobby the cookies to stop the screaming.
  • In this situation, the loud screaming had the function of getting the cookies. The behavior, or tantrum, has become reinforced, meaning that in a similar situation, Bobby is more likely to scream because he got the cookies when he screamed last time.
Escape

• Antecedent – It is time for math and Suzy hates math! Suzy starts her counting exercises.

• Behavior – Suzy hits her teacher and starts screaming.

• Consequence – The teacher sends Suzy to time-out.

• In this situation, the loud screaming and hitting had the function of escaping math exercises. The behavior has become reinforced, meaning that in a similar situation, Suzy is more likely to scream and hit because the math exercises were removed last time she screamed and hit.
Avoidance

• Antecedent – It’s gym time, but Jennifer doesn’t want to go to gym class.

• Behavior – She hits and scratches her instructor as she is trying to get Jennifer to transition to the gym.

• Consequence – Jennifer’s time in gym class is delayed as her instructor tries to wait until she calms down.

  • In this situation, the hitting and scratching had the function of delaying gym class. The hitting and scratching have become reinforced, as they removed situation of having to go to gym class for the time being. The next time it is time to go to gym, Jennifer is more likely to hit and scratch because her gym class was delayed last time.
Non-social

• Antecedent – Often unknown because it is not observable.
• Behavior – hand flapping
• Consequence – There is some form of internal reinforcement, possibly a sensation.

• Other Examples: Dancing, exercise, rocking, finger flicking/tapping, foot tapping, hair twirling, humming, visual patterns, masturbation, scratch to remove an itch (automatic negative reinforcement), self-injurious behavior
Physical/Medical Condition

- Antecedent – Johnny is sitting and playing his favorite game with his best friend Tommy, eating his favorite fruit snacks!
- Behavior – Johnny begins screaming and crying.
- Consequence – Johnny’s time in gym class is delayed as his instructor tries to wait until she calms down.
  - In this situation, Johnny had access to tangibles, had attention from his best friend, and had no demands being placed on him. After conducting the proper assessments, and the function is still unclear, seek medical attention immediately!
# Function Based Interventions

<table>
<thead>
<tr>
<th>Function</th>
<th>Appropriate Strategy</th>
<th>Inappropriate Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-social</td>
<td>Response block/redirection&lt;br&gt;Teach a replacement behavior</td>
<td>Allow increased access to behavior</td>
</tr>
<tr>
<td>Escape/avoidance</td>
<td>Redirect to task&lt;br&gt;Teach child appropriate way to escape</td>
<td>Allow child to escape or avoid task</td>
</tr>
<tr>
<td>Attention</td>
<td>Ignore the behavior&lt;br&gt;Teach child appropriate way to access attention</td>
<td>Reprimand&lt;br&gt;Give attention</td>
</tr>
<tr>
<td>Access to tangibles</td>
<td>Do not give access to tangible following that behavior</td>
<td>Give child what he wants</td>
</tr>
<tr>
<td>Medical/Physical</td>
<td>Seek medical attention immediately</td>
<td>Ignore/Reprimand Behavior</td>
</tr>
</tbody>
</table>
Interpreting Information and Formulating Hypotheses

• Write hypothesis statements in ABC format

Assuming the target behaviors stopped after the consequence was provided:

• Hypothesized function = escape from hand washing or lunch
Developing an Intervention

• FBA does NOT identify the interventions that will be effective for the behavior

• But it DOES identify the function of the behavior which is useful in developing an intervention
Replacement Behaviors

• When targeting a behavior for decrease, there will always need to be a replacement behavior which will serve the same function.

• A replacement behavior needs to be taught that will make the interfering behavior irrelevant (doesn't work, has no purpose), inefficient (doesn't work as well as a more appropriate behavior), and ineffective.
Functional Equivalence

• Intervention must match the function of the problem behavior.

• The replacement behavior being taught must require less response effort (easier to perform) than the undesired behavior.

• The payoff magnitude must also be equivalent to the response magnitude, and then quickly fade.
Functional Equivalence

- If problem behavior = access function
  - Intervention should provide desired outcome (access to attention or tangibles) for alternative behavior
  - OR alter antecedent conditions to make attention and/or tangibles less reinforcing
- If problem behavior = escape function
  - Intervention should provide escape for replacement behavior
  - OR alter task demands to make escape less reinforcing
Functional Equivalence

• If it is not a function based intervention:
  • …it will be ineffective
  • …it will not produce the behavior change that we want to see
  • …the behavior likely will occur at higher rate or magnitude than before.
Determining replacement behaviors...

A learner engages in physical aggression to access attention

• What are some behaviors that can replace the physical aggression for the learner to gain attention from others?
  • Teach Raising hand
  • Provide attention throughout the day on a higher schedule, making it unnecessary to seek attention in inappropriate ways.
  • Teach Asking for attention
  • Build in a "talk time" where the learner gets attention for a set period of time and an opportunity to engage in whatever topic of conversation is necessary.
Behavior Intervention Plan (BIP)

• Once the function of the behavior has been determined, a Behavior Intervention Plan (BIP) will be developed.
• The purpose of a BIP is to spell out what behaviors are being targeted for change and how change will be handled.
• The plan will include behaviors to decrease as well as behaviors to increase:
  • Preventative strategies
  • Reactive strategies
• When targeting a behavior for decrease, there will always need to be a replacement behavior (more appropriate behavior).
• A replacement behavior will serve the same function as the maladaptive behavior.
Implementation of the BIP

• It is very important that everyone involved with the individual must agree to implement the BIP consistently.
• Inconsistent application of any intervention is likely to result in an increase in the targeted inappropriate behavior or result in the presentation of new inappropriate behaviors.
Reinforcement

• We use reinforcement to increase behavior.
• Reinforcement involves
  • The systematic and immediate delivery of a consequence following a behavior
  • An increased likelihood that the behavior will happen again
• We can only know that something is a reinforcer after we watch its effect on behavior over time.
• Providing a preferred item contingent upon a behavior will not necessarily result in an increase in behavior under similar conditions in the future
Positive Reinforcement

- Involves the addition of something desirable that increases behavior
  - Johnny sees a friend eating a cookie. He points to the cookie. His mom then gives him the cookie.
    - **Antecedent**: sees friend eating a cookie
    - **Behavior**: pointing to a desired item (cookie) to ask for it.
    - **Consequence**: received a cookie only when he asked for it.
    - **Future effect**: makes pointing to a desired item (cookie) more likely to occur the next time he sees something he wants.
Negative Reinforcement

• Involves the removal of something undesirable and/or aversive that increases behavior
  • At a carnival, Johnny is overwhelmed by the loud noises. Johnny requests to leave, saying “car, car.” Mom takes Johnny home.
    • **Antecedent**: Loud noises
    • **Behavior**: requesting to go home
    • **Consequence**: Mom takes Johnny home which terminates the noise.
    • **Future effect**: Johnny requesting to go home is more likely to occur the next time he experiences loud noises.
Dangers of Intermittent Reinforcement

• Intermittent Reinforcement is occasionally giving into the behavior.

• When a behavior is sometimes reinforced, an individual will be more persistent in seeking the desired outcome.

• If a child has a tantrum to get a new toy while in a store and mom or dad give in every 5th time or so; the child is more likely to have tantrums more often to get their parents to give in. If a person is not getting the event or object they desire, the behavior will become more intense and last a longer duration until they get what they want.
Intermittent Reinforcement

• Example: In a casino, people will sometimes win money, but often will not. People will continue to pull the handle of the slot machine because they know there is still a chance they will win. The more they pull the handle, the closer they think they are to winning.

• In other words, it is better to give in every time to a behavior than to give into it occasionally.
Intermittent Reinforcement

• Example: While in the grocery store, Bobby wants the candy bar. Mom says no and Bobby starts screaming. Mom gives in and gives Bobby the candy bar to calm him down and stop the screaming. Next time they are at the store, Bobby starts screaming when he asks for a candy bar, but mom won’t give in this time. Bobby’s screaming becomes louder and more persistent, and when that doesn’t work, he throws himself on the floor kicking and screaming.

• The behavior became stronger and took on a new form.
• It will take several instances in Bobby not getting the candy bar when he throws a tantrum before he realizes it doesn’t work, and eventually the behavior no longer occurs in that situation as long as reinforcement is not given.
Instructional Control

• Instructional Control involves two critical components:
  1. You must be associated with the delivery of reinforcement
  2. You must develop a history of reinforcing the learner’s compliance to your instructions
Why is instructional control necessary?

- Effective and efficient teaching and learning
- Establish relationship with the learner
- The learner can “learn to learn”
- Teacher can outline and expect learner to engage in appropriate behavior.
- Learner wants to be with and listen to teacher.
- Learner can be confident with responses
Stages of Developing Instructional Control

• 1st - Pairing
  • At the beginning, you might spend most of your time with a learner simply pairing yourself with reinforcement, until you have established a good rapport.
  • No demands
  • Maintaining a high success rate (100%)
Stages of Developing Instructional Control

2\textsuperscript{nd} – Deliver instructions that are easy and mastered

- Introduce instructional control activities along with pairing activities.
  - As simple as a "high five," a visual motor task such as putting a single form box piece in, instructions such as "sit down" in the context of an activity (e.g., sitting down for snack)
- When learner complies with your instruction, provide a TON of reinforcement while labeling the behavior
- Continue in this phase until learner is happy to see you, interacts with you, and readily complies with your instructions.
- As the history of reinforcement for compliance grows, your instructional control grows and you can gradually increase the difficulty of instructions.
Stages of Developing Instructional Control

- 3rd – Teaching new skills interspersed with mastered skills
  - Flow of pairing activities and instructional control (easy) activities along with the introduction of any new skills (Task Interspersal)

- The process of pairing and maintaining instructional control continues throughout your experience with the learner
How to maintain instructional control

- Control access to reinforcers
- Give small amounts of the reinforcer at a time
  - a sip of juice, small piece of food, 10 sec of tickles, 10 sec of movie, etc.
- Continue to pair self with client
- Reinforce appropriate behaviors
- CONSISTENCY—do not provide intermittent reinforcement for non-compliance/maladaptive behaviors
- Follow through with expectations
Tips on Instructional Control

- Pairing yourself with the learner—you must be associated with the delivery of reinforcement so you become reinforcing to the learner.
- Reinforce appropriate behavior per skill level
- Maintain a high success rate
- Follow through with expectations
- Show learner what you expect from him/her and what he/she should expect from you
Dangers of not having instructional control

- Danger to self and others
- Learning cannot occur
- Reinforce/shape inappropriate behaviors
- Punish learner’s current skills
- Confuse learner
- Teacher becomes aversive to learner
Signs that instructional control has NOT been established

- Noncompliance!!!
- Learner does not attend to instructor
- Learner does not respond appropriately
- Learner does not show improvements or gains in appropriate behaviors
- Learner engages in inappropriate behavior at higher frequency/severity that baseline
- Learner attempts to escape environment/instructions
Remember…

• Every time your client shows you that he wants something, you have an opportunity to teach.
• Capitalize on client’s “in-the-moment” motivation to present simple instructions to teach something new or maintain instructional control.
• Use what you know about the client’s general interests and motivations to create a motivating context for learning.