Let’s Practice! Verbal Behavior 101
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Teach Me LLC.

Agenda
– Applied Behavior Analysis
  • Definition of ABA
  • Three term contingency
  • Functions of behavior
  • Reinforcement
    – VERMI
    – Positive & Negative Reinforcement

Agenda
– Using ABA Strategies
  • Extinction
  • Shaping
  • Prompting
– What are the Verbal Operants?
  • Mand
  • Tact
  • Receptive
  • Intraverbal
  • Echoic
  • Motor Imitation
What is ABA?

APPLIED BEHAVIOR ANALYSIS

Definition:

"Applied behavior analysis is the science in which procedures derived from the principles of behavior are systematically applied to improve socially significant behavior to a meaningful degree and to demonstrate experimentally that the procedures employed were responsible for the improvement in behavior." (p. 14)

Cooper, Heron, and Heward (1987)
**Applied Behavior Analysis or ABA**

"ABA or Applied Behavior Analysis is a time tested and data based strategy for teaching children with disabilities. It is most often used with children with autistic spectrum disorders, but is an effective tool for children with behavioral disorders, multiple disabilities, and severe intellectual handicaps. It is the only treatment for Autistic Spectrum disorders approved by the FDA (Food and Drug Administration)."

**Resource:** ABA -- Applied Behavior Analysis By Jerry Webster, About.com Guide
http://specialed.about.com/od/specialedacronyms/g/aba.htm

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**Understanding the Functions of Behavior**

- **Antecedent** • The event that occurs before a behavior
- **Behavior** • The observable response
- **Consequence** • The event that occurs after a behavior

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**ABC: Three term contingency**
Using an ABCD log (example)
This form is for tracking the environmental events that may have a
functional relationship to behaviors. Fill out the date, setting or location,
the antecedent (what happened before the behavior), the behavior (the
observable response), the consequence (what happened after the
behavior), the duration (how long the behavior lasted) and your initials.

<table>
<thead>
<tr>
<th>Date</th>
<th>Setting</th>
<th>A Antecedent</th>
<th>B Behavior</th>
<th>C Consequence</th>
<th>D Duration</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/12</td>
<td>At table</td>
<td>Demand to give apple</td>
<td>Stood materials off the table</td>
<td>Kept the demand to give apple</td>
<td>5 min.</td>
<td>T.G.</td>
</tr>
<tr>
<td>1/1/12</td>
<td>In lunch room</td>
<td>Told to come sit down</td>
<td>Fell on the floor</td>
<td>Kept the demand to sit down</td>
<td>12 min.</td>
<td>T.G.</td>
</tr>
<tr>
<td>1/5/12</td>
<td>In lunch room</td>
<td>Saw someone with candy</td>
<td>Bolted and tried to take the candy from other student</td>
<td>Blocked and had return to seat</td>
<td>3 min.</td>
<td>T.G.</td>
</tr>
</tbody>
</table>

Understanding Behavior

Looking at Behaviors

Topography: What

Function: Why
(motivation is key)

Functions of Behavior

Social Mediated Positive

Social Medicated Negative

Automatic Positive

Automatic Negative

Neidert, (2010)
Socially Mediated Positive Reinforcement

- Something delivered by another person following a behavior that makes it more likely to occur.
  - Tangibles
  - Attention
  - Activities

Socially Mediated Negative Reinforcement

- Something (demand) removed by another person following a behavior that makes it more likely to occur.
  - Escape
  - Avoidance

Automatic Positive Reinforcement

- Movements or activities of the body that produce a feeling that makes it more likely to occur.
  - Self-stimulatory Sensations
Automatic Negative Reinforcement

- Movements or activities of the body that remove an unpleasant or uncomfortable feeling that makes that behavior more likely to occur.
  - Termination of pain
  - Pain Attenuation

What is Reinforcement?

Reinforcement

- An event that follows a behavior that makes that behavior more likely to occur.

  * Positive reinforcement
  * Negative reinforcement
Positive Reinforcement

(Alberto & Troutman)

The contingent presentation of a stimulus immediately following a response, which increases the future rate and/or probability of the response.

Negative Reinforcement

(Alberto & Troutman)

The contingent removal of an aversive stimulus immediately following the response; increasing the rate and/or probability of the response.

Examples of Common Identified Reinforcers

- Praise (i.e. way to go, high five)
- No response
- Privilege
- Access to a toy
- Allowance to escape a situation or take a break
- Snacks
Motivation / Reinforcement

Who? Everyone
When? All the time
Why? To increase, decrease or maintain behavior

“Motivation is of central importance to the learning process, and reinforcement is usually the key to motivation.” (Neidert, 2010)

Motivation / Reinforcement

V ------ Value
E ------- Effort
R ------- Rate
M ------- Magnitude
I ------- Immediacy
V- Value  E- Effort

- The payoff (value) should be worth the amount of work (effort)
  
  "Is the reinforcer valuable to the individual for the amount of effort required?"

M- Magnitude

- Reinforcers should be delivered in a worthwhile amount that is enough to increase the behavior, but not too much to satiate the individual.
- Size can refer to amount or duration of engagement
  
  "Was the amount of the reinforcer used worthwhile?"

R- Rate

- Frequency of reinforcement
- Fixed vs. Intermittent
  
  "How often is reinforcement delivered?"
I-Immediacy

• Reinforcers should be delivered immediately following the behavior that you want to increase.

“Was the reinforcer delivered immediately after the behavior?”

Motivation / Reinforcement

V ------ Value
E ------ Effort
R ------ Rate
M ------ Magnitude
I ------ Immediacy

Differences in Terminology

<table>
<thead>
<tr>
<th>Common terms</th>
<th>ABA terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>expressive language</td>
<td>verbal behavior</td>
</tr>
<tr>
<td>requests/demands</td>
<td>mand</td>
</tr>
<tr>
<td>comment/label</td>
<td>tact</td>
</tr>
<tr>
<td>imitation</td>
<td>echoic</td>
</tr>
<tr>
<td>communication</td>
<td>intraverbal</td>
</tr>
</tbody>
</table>
Verbal Operants

• Mand
• Tact
• Receptive
• Intraverbal
• Echoic
• Motor Imitation

Mand

• A Mand is a function of language which means to request an item or activity based on the motivation for that item or activity.

Tact

• A Tact or label is a function of behavior where there is a non-verbal stimulus that evokes the language for that item.
Receptive

A receptive command is when someone follows an instruction to give an item or perform a task.

- Example: “Give me the cup.”
  » The student gives the cup.

Intraverbal

An intraverbal is a response to someone else’s verbal behavior without a visual stimulus present.

- Example: “What is your name?”
  » “Billy”

Echoic

An echoic is when someone matches someone else’s verbal behavior.

- Example: “Say water”
  » “water”
Motor Imitation

- Motor imitation is when someone does a motor movement and the learner imitates or copies that motor movement.
- Example: “Do this” (teacher claps) → (student claps)

Using ABA Strategies

ABA Strategies

- Extinction
- Shaping
- Prompting
- Errorless Teaching
- Correction Procedure
Extinction

- Extinction is the technical term to describe the procedure of withholding or discontinuing reinforcement of a previously reinforced behavior, resulting in the decrease of that behavior.

(Cooper, 2007)

Shaping

Definition:
- Shaping is reinforcing successive approximations of a target behavior while extinguishing earlier approximations leading to the desired behavior or target behavior.

(Cooper, 2007)

Shaping: reinforcing approximations which lead to the desired behavior

- Lets experiment with shaping to teach the response we want in this activity.

1. Find a partner and make a teaching goal.
   Ex: Molly will place the book on her head.
2. Next practice your shaping skills using reinforcement.
   Ex: Set the book out and then reinforce her (ex. clapping) as she gets closer to making the goal. Don't reinforce when her behavior (ex. look away and ignore) does not lead her to the goal.
Prompting

Definition:

- A prompt is a cue that is added to the environment in order to evoke the correct response.

(Cooper, 2007)

Prompt:
a cue that is added to the environment to evoke the correct response

- Most to Least
- Least to Most

Types of Prompts:
- Physical
- Gesture / Imitative
- Verbal / Phonemic
- Textual
- Positional
Prompt: a cue that is added to the environment to evoke the correct response

- Let's experiment with prompting to teach the response we want in this activity.

1. Find a partner and make a teaching goal.
   Ex: Molly will place the book on her head.
2. Next practice your prompting skills using various prompts.
   Ex: Put the book on your head (imitative) and then give the book to Molly and see if she imitates. You can also say do this for a clear prompt (verbal).

Prompting & Shaping

- Use both when teaching skills.
- Increase reinforcement as the behavior becomes more accurate.
- Use antecedent prompts to encourage behavior to occur before it can be done incorrectly.
- Fade prompts to encourage accuracy and independence.

Teaching Procedures

1. Pair Teaching Environments With Reinforcement and Use Competing Reinforcers
Teaching Procedures

2. Use Extinction For Problem Behavior When Needed

Teaching Procedures

3. Intersperse Easy And Difficult Demands

Teaching Procedures

4. Pace Instruction Properly
Teaching Procedures

5. Mix and Vary Instructional Demands

Teaching Procedures

6. Fade In Number of Demands

Teaching Procedures

7. Fade In Effort/Difficulty Of Tasks
Teaching Procedures

8. Immediately Deliver Reinforcement

Errorless Teaching

Instructor says:
“What is it?”

Learner says:
“dog”

Reinforce!

Prompt “dog”

Transfer Trial (test for Inc.)

Initial Teaching

Stimulus → 0 Sec. Prompt → Correct Response → Reinforce

Transfer Trial to Independence

Stimulus → 2 Sec. Delay → Incorrect Response → Correction Procedure

Practice Makes Permanent!

Transfer Trial (test for Inc.)

Correct Response → Reinforce
Correction Procedure

Step 1: Correction Trial (Prompt)
- Stimulus → 0 Sec. Delay Prompt → Correct Response → R+

Step 2: Transfer Trial (Practice)
- Stimulus → 2 Sec. Delay → Correct Response → R+

Step 3: Distracters

Step 4: Probe for Independence (Review)
- Stimulus → 2 Sec. Delay → Correct Response → R+

Resources: Articles & Books to read

- The Verbal Behavior Approach: How to Teach Children with Autism and Related Disorders by Mary Lynch Barbera, RN, MSN, BCBA

Resources: websites

- http://www.marksundberg.com/
- www.autismspeaks.org
- www.autism-society.org
- www.cdc.gov/autism
- www.abainternational.org
- http://www.centerforautism.com/what-is-aba.php
- www.feat.org
- http://verbalbehaviorapproach.com/
- http://autismpdc.tpg.unc.edu/content/national-standards-project
References


References


Thank You!!!

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