The Verbal Behavior Approach: Home Programming for Children with Autism

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My Story—Pre-Autism

• Born and raised in Berks County, PA
• Graduate of West Chester University (BSN) and University of Pennsylvania (MSN)
• As a nurse manager and educator, published several articles in peer-reviewed nursing journals related to nursing retention, time management, and shift-to-shift report.

My Story—Pre-Autism (cont.)

• Moved back to Berks in 1996
• Gave birth to two boys, Lucas in 1996 and Spencer in 1997
• In March of 1998, my husband first mentioned the word autism as a possibility to describe Lucas’ delays and differences.

My Story—Post Autism

• Became the “gung ho” parent
• Started and coordinated an intensive behavioral program for Lucas
• Founding President of Berks ASA
• Began giving lectures and publishing articles on autism
• Became Board Certified Behavior Analyst

My Story—Post Autism

• Lead Behavior Analyst for the PA Verbal Behavior Project (2003-2010).
• Co-author of a multiple baseline single subject design study in peer-reviewed journal (Barbera & Kubina, 2005)

My Story—Post Autism

• Fall 2007, published a study entitled: “The Experiences of Autism Mothers Who Become Behavior Analysts: A Qualitative Study”
• Currently a Doctoral Candidate at Alvernia University pursuing a PhD in Leadership
• Speak and consult nationally and internationally on the subject of autism.
Autism Mothers

• As Ogden Lindsley, a well-known behaviorist once said:
  “All progress comes from mothers who won’t take no for an answer”

(Merbitz, Personal Communication, 11/25/08).

Autism

• There is a world wide rise in the numbers of autism with 1:100 US children now being diagnosed
  
• The spectrum of autism is very wide
  
• Autism is life-altering and affects the entire family
  
• No known cause or cure but Early Intensive Behavioral Therapy is the treatment of choice

Lovaas Study

• Published in 1987
  
  — 59 children
  
  • 19 received 40 hours/wk 1:1 ABA for 2 years
  
  • 20 received 10 hours/wk
  
  • 20 received standard special education classrooms/OT/speech
  
  • 47% of those receiving 40 hours/wk of treatment became “indistinguishable from their peers by first grade”

Let Me Hear Your Voice

• ABA treatment became popular in the mid-1990’s when Catherine Maurice, a parent of two children with autism who both “recovered” from autism using this approach, published two books detailing Lovaas type ABA therapy.

Bailey and Burch Book

Bailey and Burch credit the entire certification of Behavior Analysts to Lovaas’ work and, more importantly to Maurice’s novel.

In the preface of How to Think Like a Behavior Analyst, Bailey and Burch (2006) state:

“Lovaas showed with intensive behavioral treatment, up to 50% of autistic children could recover. Ms. Maurice found a behavior analyst therapist, and as we say, the rest is history.”

Bailey and Burch Book

Maurices’ book was:
  “an overnight sensation with parents all over the United States” and
  “Suddenly, the best kept secret was out in the open, and a huge demand for qualified behavior analysts was created” (p. xiv).
Within ten years of the Maurice book, over fifty graduate programs emerged and were approved to teach behavior analysis and the National Behavior Analyst Certification Board was formed.

Applied Behavior Analysis (ABA)

Definition

“Applied behavior analysis, or ABA, is a scientific approach for discovering environmental variables that reliably influence socially significant behavior and for developing a technology of behavior change that takes practical advantage of those discoveries.” (Cooper, Heron, and Heward, 2007, p.3)

Basic Behavioral Principles

Antecedent - any stimulus that happens before a behavior

Behavior - an observable and measurable act of an individual

Consequence - any stimulus that happens after a behavior

Examples of Three Term Contingency

- "Touch nose" – Child touches nose – Receives piece of cookie
- "Do Puzzle" – Child falls to floor – Demand withdrawn

Four Functions of Behavior

1) Socially Mediated Positive Reinforcement (Attention/Access to Tangibles).
2) Socially Mediated Negative Reinforcement (Escape from Demands).
3) Automatic Positive Reinforcement (Self Stimulation).
You use the principles of ABA all day long!

• ABA is used to:
  – Increase pro-social behaviors
    • Language, self care skills, academic skills.
  – Decrease problem behaviors
    • Tantrums, biting, kicking, crying

$1000 Activity

• Think of a child you know with challenging behaviors:
  – If I gave you $1000 for that child to have a “good day” with little to no problem behavior, what would you do?

Pick one or two target behaviors

• Select the target behavior to be reduced by examining...
  – The seriousness of the behavior...if could injure self or others...target these before behaviors such as hand flapping or poor attention.
  – The frequency of the behavior

Consequences

• Any behavior that occurs repeatedly is serving some useful function and producing some type of reinforcement.
  
  Two real-life examples

Consequences

• After a behavior has occurred the environment can change in several ways:
  1. A neutral event can happen: if nothing happens that is relevant, the consequence will likely have no effect on the behavior.
  2. Things can get better: if things get better, the behavior will likely occur again under similar conditions. This is called reinforcement.
  3. Things can get worse: if things get worse, the behavior will likely not occur again under similar conditions. This is called punishment.

Is a Sticker a Reinforcement and Time Out a Punishment?

• Need to look whether the sticker or time out is increasing or decreasing the frequency of the target behavior.

• Most people think Time Out is a punisher but it functions as a reinforcement for many children. Likewise, stickers are not always reinforcers.
Common Question

When I tell my child to _____________
(take a bath, do homework, match the pictures)
He/She ______________________
(whines, hits, bites, kicks, flops to the floor)
What should I do to make him or her stop?

Problem Behaviors

• The demands are too high
    AND/OR
• The reinforcement is too low

Three Steps

1. Take some rate data (how often it is occurring per hour/day/week) and take ABC data.
2. Describe situations when the problem behavior almost always occur (bath time) and when it hardly ever occurs (computer)
3. Pair or re-pair hard activities such as bath time and sandwich hard activities between easy activities (snack then bath then computer).

*** Most of your attention should be on preventing problem behavior using antecedent manipulations.***

Antecedent Interventions

• Changing the environment before the behavior occurs to prevent the behavior.

  Reconfigure class layout or ratio
  Give more or less time at a center
  Get more sleep at night or nap
  Eat breakfast or serve snack
  Give 8 positives for every negative

Positive Parenting Book

Reactive Interventions

• Interventions implemented after problem behavior occurs.

  • Some examples:
    – Count and Mand (use for attention only)
    – Planned Ignoring (use for attention only)
    – Time Out (use for attention only)
    – Work through Demand (use for escape only)
If you find yourself using reactive interventions frequently

• Continue to take data or re-start data taking to determine setting events, antecedents and functions of target behavior
• Your demands are probably too high and/or reinforcement too low
• The environment might need to be changed

Three things that matter no matter what the age or functioning level!!

1. Problem behaviors at or near 0
2. Ability to request wants and needs to an unfamiliar adult
3. Independent toileting

Transition Issues

• Imagine you are at the beach on a beautiful sunny day having a cold drink and reading a great book. On a scale of 1 to 10 with 10 being the most reinforcing activity, you would rate being at the beach on this day to be a 10.

Demands are Made and Problem Behaviors Occur

• Without warning, I abruptly come up to you and say “all done beach, time to load heavy boxes in a truck.” You would most likely not like this at all and might start displaying problem behaviors in the form of arguing, stomping you feet, and slamming your chair onto the sand.

We All Have Problems Transitioning

• We all have problems with transitioning from high preferred to low preferred activities.
• The key is to ease transitions by not asking a child to transition from a 10 (a highly preferred activity) to a 2 (work) constantly throughout the day.

Five Tips for Transitioning

1) Dangle the carrot (the reinforcement) before problem behavior occurs.
2) Don’t physically move a student from one location to another (even if they are small enough to carry or move).
3) Whenever possible, give choices.
4) Sandwich harder activities between two preferred activities and consider using schedules and timers.
5) Make sure all “work” stations are paired with reinforcement and avoid the word “work” whenever you can.
Common Question....
Which is Better—ABA or VB??

Which is better....Soda or Sprite?
Which is better....Religion or Catholicism?

What is Verbal Behavior?
Behavior that is reinforced through the mediation of another person’s behavior

Applied Behavior Analysis

Discrete Trial Teaching
Lovaas Therapy

Direct Instruction
Intensive behavioral Intervention
Incidental Teaching

Verbal Behavior

Precision Teaching
Fluency Based Instruction

Dual Path of Applied Behavior Analysis Research

LOVAAS (UCLA)
ABA Research
Plus Discrete Trial Training (structure)

MICHAEL (WMU)
ABA Research
Plus

Discrete Trial Training
Plus Skinner’s Analysis of Verbal Behavior (function)

Traditional Discrete Trial Teaching and the VB Approach: Similarities and Differences

Similarities
• Both based on decades of ABA research
• Both concerned with improving language & learning skills and reducing problem behavior
• Both use Intensive teaching sessions

Differences
• VB adds heavy emphasis on motivation, pairing and manding while DTT does not
• VB describes expressive language in terms of specific verbal operants defined by BF Skinner in 1958

Article in Autism File

Getting Started with the Verbal Behavior Approach
Common terms for the Verbal Operants

- **Mand** = request
- **Tact** = label
- **Intraverbal** = conversation, answering a question, responding when someone else talks
- **Echoic** = repeating what someone else says

Receptive or Listener Responding = following directions

### Verbal Operants

<table>
<thead>
<tr>
<th>Verbal Operant</th>
<th>Antecedent</th>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mand</td>
<td>Motivator (wants cookie)</td>
<td>Verbal behavior (says “cookie”)</td>
<td>Direct reinforcement (gets cookie)</td>
</tr>
<tr>
<td>Tact</td>
<td>Sensory Stimuli (sees or smells cookie)</td>
<td>Verbal behavior (says “cookie”)</td>
<td>Non-specific reinforcement (gets praised, for instance)</td>
</tr>
<tr>
<td>Intraverbal</td>
<td>Verbal stimulus (someone says: “What do you eat?”)</td>
<td>Verbal behavior (says “cookie”)</td>
<td>Non-specific reinforcement (gets praised, for instance)</td>
</tr>
<tr>
<td>Echoic</td>
<td>Verbal Stimulus (someone says “cookie”)</td>
<td>Verbal behavior (“repeats all or part of antecedent says “cookie”)</td>
<td>Non-specific reinforcement (gets praised, for instance)</td>
</tr>
<tr>
<td>Receptive</td>
<td>Verbal stimulus (someone says “touch cookie”)</td>
<td>Non-verbal behavior (child touches cookie)</td>
<td>Non-specific reinforcement (gets praised, for instance)</td>
</tr>
</tbody>
</table>

### Recommendations for Mason

- Matching Identical Objects/Pictures (F/3)
- Increase Verbal Imitation using Mand
- Work on Fill-ins with songs
- Baseline Labels
- Set up Mand Sessions—at least (2) 10-minute sessions/day
- Keep demands low (VR 3 or 4)

### Recommendations for Mason 6 weeks later

- Puzzles/easy toys (shape sorter)
- Matching—start categories—make sure he knows tacts of exemplars
- Prompt him to request actions and missing items
- Baseline labels (buy flash cards)
- Mix 80% easy to 20% hard w/VR 3
- Continue teaching songs
- Play doh and coloring
- Count and Mand for access to tangibles
ABLLS--Lucas

Conversation

- Advanced Tacts
- Advanced Mands
- Advanced Intraverbals

VB-MAPP

- www.avbpress.com

Language Barriers--Lucas

Recommendations for Lucas

- Intensive teaching and NET sessions
- VR 15 (with 80% easy/20% hard)
- Teach prepositions/pronouns
- Teach manding for attention/information
- Edmark reading program
- Teach coin and time identification
- Leisure and self care skills
Focus on Self Help Skills

Mia’s VB-MAPP

Language Barriers

Mia’s Program

Some Challenges with Home Programming

Pros and Cons of Home Programming (According to Mia’s Mom)

Cons
- "Not for the weak at heart"
- Extremely time consuming (really difficult if other children at home during the day)
- Advocating for services/funding is draining
- Hiring/Accepting/Training/Retention/Turnover of Staff
- Difficult to run/watch extinction procedures

Pros
- Parent is in control and the “team leader.”
- Access to training to learn skills that you can use in short and long term for all of your children and for others.
- Exciting to see progress first-hand

Focus on Self Help Skills

Mia’s VB-MAPP

Language Barriers

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Five Lessons I Learned about Parenting a Child with Autism

1. Autism is very treatable. It is not a death sentence.
2. Early, intensive behavioral intervention should be started as quickly as possible.
3. Medication and alternative therapies (if tried) should be tried after a good ABA program is in place and should be done one at a time with good record keeping under the supervision of a physician or health care professional.
4. Parents need to become experts and advocates.
5. This a marathon, not a sprint.

Using an ABA/VB approach

- Scientifically validated ABA approach
- Child friendly with a focus on pairing and manding first
- Problem behaviors should decrease and pro social behaviors should increase fairly quickly
- Encourages all team members to treat behaviors consistently and increase demands at the same pace.
- Focuses on data based decision making

Questions?

- www.verbalbehaviorapproach.com
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- Thank You!

References


