Putting The Analysis Back Into Behavior Analysis

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Outline

- A Brief Discussion of “Cookie-Cutter” Procedures
- A discussion of different levels of analysis
- How we specify the “problem” in behavior problem
- Using a “comparison” model to help specify the problem(s)
What steps do we take when the function of the behavior is well known to most or obvious to the behavior analyst?

Asking multiple “Why” questions

We will take a look at a framework for identifying the category of a problem rather than specific behaviors or functions
Cookie-Cutter Procedures

- These are procedures that require little or no analysis and although they may have an impact on the target behavior, may have little to do with the overall problems that exist.

- Some of these procedures may be based loosely on a functional assessment or reinforcer assessment, but they rarely “hit the nail on the head”
Cookie-Cutter Procedures

- Punishment
- Extinction
- Satiation
- DRO DRI DRA (when the “A” isn’t a true functional equivalent)

All too often these procedures are not properly coupled with meaningful, relevant acquisition goals
“Were it not for our exquisite sensitivity to a variety of beneficial aversive stimuli, most of us would have never survived past the age of five.”

Reference: Me....just now....

These procedures can and often do produce decreases in the behaviors they follow and may be necessary and even highly effective when coupled with other procedures.
Punishment

There are two glaring problems though in applied settings:

First, we use “traditional” punishers with children with disabilities or adults with disabilities who may have been engaging in their problem behaviors for decades.

Second, mild traditional punishers can be effective for persons having certain skills. Chief among those are the appropriate responses to being (overtly) punished.
Punishment

- For many persons with disabilities, who do not have certain "self-control" repertoires and other relevant experiences, typical alleged punishers will often initially set the occasion for aggression and fail to prevent subsequent instances of the problem behavior when the conditions are the same.

- Even the "masked" punishers (immediate reinforcer loss) can produce the same levels of aggression as the introduction of a more typical aversive event.
Punishment

What is the appropriate response to being informed that you have lost your points for the day?

The use of punishment procedures is not a bad thing (Punishment on Trial, Cipani), its just that these procedures are often used in an ineffective, counterproductive manner with individuals who are ill-prepared to handle them
Punishment

“Locks are good for keeping honest people honest”

Many of the punishment procedures attempted with special populations work well with people with well developed self-control repertoires and behavior problems that are simply not that severe.
Extinction

WARNING

Vending machine design prevents dispensing free product or coins.
NEVER ROCK OR TILT:
Machine can fall over causing serious injury or death.
Extinction

Extinction, like punishment can absolutely have an impact on behavior, and sometimes very quickly.

It can also go horribly horribly wrong.

Two broad categories of extinction:
Extinction

- Digital Extinction: Withholding the reinforcer in a very “all or none” fashion: For example, someone is playing with the light switch so you throw the circuit breaker controlling it.

- Analog Extinction: When the alleged reinforcer occurs on a continuum and is likely not completely “turned off”, like attention. Here there is much more slippage. What is the critical factor of the attention? Eye contact? Proximity? Voice? Facial Expressions?
Extinction

1. If the critical quality of the reinforcer is poorly understood, then a true “digital extinction” may be difficult to achieve because of intermittent reinforcement.

2. If a true extinction is difficult, or contraindicated (terrible extinction burst), then it may be better to adopt a procedure that is more “analog” in nature.
Extinction

Dr. Glenn Latham understood this when he would give a non-reactive sympathetic response to junk behavior. It is not the response expected, but it is a response nonetheless and may avoid the pitfalls of a “talk to the hand” approach.

This is truly not so much extinction as it is differential reinforcement (small response after inappropriate behavior, big response after appropriate behavior).
Satiation

- He’s great as long as you are feeding him
- He’s great as long as you don’t move more than 36 inches away from him
- She’s no problem as long as her “The Lion King” DVD can be set to loop between time markers 46:13 and 47:23
- Often times true satiation is never achieved and we are looking at a more “CRF” paradigm
Satiation

Many people manage the individuals they work with using this procedure.

It may temporarily alleviate a whole host of behavior problems.

It generally ensures that no one will move forward in their treatment and that potentially effective reinforcers can not be used to motivate the individual.

Some people use food satiation for “runners” because eventually........they can’t!
The DRs

- DRO DRI DRA (DRO most evil)
- The DROs of old were used with no connection to a functional assessment (and often still are today)
- What does he like? Candy
- Prescription: Administer Candy P.O. if no SIB for 2 minutes. Repeat as necessary until cured.
The DRs

- Even DROs can be effective in breaking the contingency between the response and the reinforcer and sometimes problem behaviors will subside due to satiation/motivation effects.

- However, DROs don’t teach skills, and may be deemed “successful” if the relevant discriminative stimuli and/or motivational operations are absent.
The DRs

Even if the DRO uses a reinforcer that has been demonstrated to maintain problem behavior, it does not fall into the category of response-produced reinforcement for there is no particular response that produces the reinforcer.

Unfortunately, the problem behavior will often produce relatively immediate and powerful reinforcers, or at least conditioned reinforcers.
The DRs

- DRIs are sometimes used, and are better because they specify a behavior to be targeted for reinforcement, but it typically has no bearing on the function of the behavior.
- Incompatible does not mean Impossible!
- DRAs are much better but sometimes the “A” is not a true functional alternative from the perspective of the client.
The DRs

Behavior Analyst: “I know there are better procedures to use than DRO, but it’s all my staff are able to do!”
What about “Cookie-Cutter” Functional Assessment?

- This procedure was and to some extent still is earth-shattering for many people, but we can and must go further in our analysis of problem behaviors.

- The procedure may “fix” single behavior problems but will typically miss the broader problems that must also, ultimately, be addressed.

- We are good with the “behavior” part of the phrase “behavior problem” but often lacking in the “problem” part.
Ask Questions like a 5-year-old

Child: Daddy Why is the sky blue?

Father: Because molecules in the air scatter blue light more than red light

Child: But why don’t they scatter red light? Are they afraid of the red light?

Father: No, it’s because blue light has a shorter wavelength than red light

Child: Why? Did the blue light forget to eat its vegetables?

Father: Look, God made it blue because he likes blue! Now stop your questions or it will rain, which is God crying because you made him sad by questioning his judgment...
More Questions

- Asking more questions can yield more important information but may also raise issues that people are not able or willing to address.

- Joey bites to escape demands.

- Why? What does he do when he has escaped?

- Is it all demands? All the time? With all people in all settings?
More Questions

- What would Joey be doing if there were no demands?
- Is he competent at what you’re asking him to do?
- Is the task relevant to the person from HIS perspective? If not, why not?
More Questions

These types of questions may be raised by certain F/A tools, but answers may not always be satisfactory or useful or incorporated into a behavior program.

What level of analysis are we using when we are doing our assessments and writing our interventions? Are we focusing too narrowly?

We may not be able to affect change at all levels of a person’s life, but we can still make others aware of problems that must eventually be addressed.
Levels of Analysis

Bull’s-eye
Levels of Analysis

- **Target Behavior**—Typically less of a problem but can still suffer from poor definitions

- **Repertoire/Motivation Problems**—is the problem due to a poor quality, incomplete, or absent repertoire, or more of a motivation problem (too much for problem behavior too little for correct behavior)

- **Immediate Environment**—Elements of the environment that worsen a behavior problem (staff interaction style, behavior problems with other clients, noise, crowding, etc.)
Quality of life issues

- Basic Needs
- Relationships (Family, Friends)
- Health
- Enjoyable Activities
- Meaningful Work/School/ADLs
- Independence that is valued by the individual
Repertoire/Motivation

Problems

- **Repertoire**
  - Exists but is small, weak, or poor quality
  - Incomplete in relation to the task at hand
  - Absent
  - The WRONG repertoire is large, strong, and high quality

- **Motivation**
  - The motivation to engage in problem behavior is too great in comparison with the motivation to engage in the appropriate behavior
Which is the problem?

- While parallel parking you have to shift from drive to reverse 87 times. This could be a repertoire or a motivation problem. Which is more likely if the problem happens during a driving exam?

- A driver runs a red light that has been red for a full 3 seconds. This could be a repertoire or a motivation problem. Which is more likely if the driver is late for an important job interview?
Immediate Environment

- This covers much of what we do when we make extensive antecedent manipulations
- Problems with Teachers/Caregivers
- Problems with other students/peers/housemates
- Problems with tasks/activities that are required/available
- “Human Factors” stuff. Population density, temperature, lighting, distractions, etc.
- Uncontrolled reinforcers/aversives
Quality of Life

- These go well beyond any particular setting and are things that can affect the person’s behavior no matter where they are.

- Basic motivators: Hunger, thirst, pain, fatigue, illness/discomfort (things that make babies cry).

- Overall health issues: Both acute and chronic, including medications and their side-effects.

- Relationships: Including problems at home with families, friends, and adult care-givers. Many individuals with significant behavior problems have no real friends and terrible relationships with almost all “authority figures”.
Quality of Life

Enjoyable Activities: Individuals who get to do more things they like tend to be happier.

The more things they are interested in, the easier it is for the person to accept alternatives when one activity is unavailable.

Meaningful Work/School/ADLs: These are things that WE tend to value more than the individual. There may be some types of tasks the individual likes more (or dislikes least).

There are also some things that may have obvious benefit to the individual from THEIR perspective, once they are learned.
Quality of Life

- Independence that is valued by the individual

- Sure it's great to learn how to brush your teeth, but what if it takes 10 years to master? What if you will never be able to do a proper job, and are not interested.

- What if you could be taught to cooperate with someone who could do it for you and do a proper job?

- What if you could learn several things to mastery in less time? Things that would yield more reinforcers?
Levels of Analysis
Bull’s-eye
Criticism of Behavior Analysis

- Other disciplines: You are only treating the symptom! Not the underlying issues!
- Behavior Analysts: Screw you! We have Data! Behavior is deserving of study in and of itself!
- It may not be that we are missing “underlying issues” but that we may be guilty of ignoring “over-arching problems”
- Head-banging is most certainly a problem, but it is seldom the problem
What's Your Problem?

This is not a functional assessment per se, and is not meant to replace a proper F/A.

It’s more of a follow-up assessment that attempts to pin down the problem a bit more once we are reasonably confident about the function.

There are 9 categories of problems that may not be exhaustive, and are not mutually exclusive. The purpose is to get the behavior analyst to look broadly at the problem.

A behavior problem is rarely a single isolated problem but is the culmination of a related group of problems.
1. Problems with Reinforcers

- Blocked Access (sees reinforcer but isn't allowed to have it)
- Won't give up reinforcer
- Problems waiting for delivery of an upcoming reinforcer
- There are no reinforcers! (allegedly)
- Constantly changing reinforcers
- Very narrow range of reinforcers
- No mands
- Unauthorized access to reinforcers
- Will not accept alternatives
1. Problems With Reinforcers

- Atypical Reinforcers
  - Social—The reinforcer is often the behavior of others under conditions of aversive stimulation. The reinforcer efficacy arises from a person appearing upset, angry
  - Non-social—The individual attempts to engage in activities or access items that are deemed inappropriate, illegal, dangerous, etc.
1. Problems with Reinforcers

The behavioral repertoire for securing and maintaining the presence of the atypical reinforcers is often large and highly resistant to extinction in comparison to the repertoire of behaviors that produce “appropriate” reinforcers.
2. Problems with Demands

- Problems when ANY demands are made “Eat your ice-cream!”
- Problems when asked to do certain tasks
- Problems only when doing tasks exceeding a particular duration
- Problems when placed in a setting or location where demands are often given
3. Problems with Peers

- Verbally or Physically inappropriate
- Access to tangibles in peer’s possession
- Produce big reaction (peer)
- “Use” peer to produce big reaction from teacher/caregiver
- Aversives produced by peers
- Problems stopping unpleasant interactions appropriately
4. Problems with Teacher/Caregiver

- Adults/Caregivers typically mediate the most powerful reinforcers as well as issue most demands.
- Individual requires inordinately high frequency/long duration attention.
- Loves making Teacher/Caregiver upset.
- Teacher interactions are neutral or even aversive, but have little reinforcing value.
5. Problems Staying in Area

- This could be a problem staying in a room or staying at a particular location in the room. This covers “runners” and “roamers.”
- Problems include:
  - Too many aversives at location
  - Too few reinforcers at location
  - Better reinforcers elsewhere
  - Unaddressed need for activity
  - Loves being chased
6. Problems Changing Locations/Activities

TRANSITIONING!

Rarely is this a problem when changing from difficult math problems to eating chocolate ice-cream while surfing the web for all Toyota pickups manufactured in 1998...

Typically the problem involves suddenly changing rates of reinforcement or introduction of aversives

May involve atypical aversives (hates being interrupted before completing current task)
7. Problems with Self-Stimulation

- What’s the difference between hand-flapping and video games?
- Hand-flapping is much cheaper!
- Occurs during tasks (may occur when rate of other reinforcers drops, or as an avoidance response)
- Occurs in the wrong place
- Occurs at the wrong time
- Or just unacceptable (there’s never a good time for rectal digging)
- Not socially valued
Problems with Task or Activity Independence

- **Problems Initiating**—There is a problem starting tasks, sometimes because it means stopping something else where there is a higher rate of reinforcement.

- **Problems Completing**—This is more a “time on task” issue than just a failure to finish the last step of a task.

- **Often coupled with a tremendous need for teacher/caregiver attention**
Problems Handling Aversives

- Atypical Aversives: Things that don’t bother most people
- “Neutralized” Aversives: Things they don’t hate but should
- Small/absent repertoire of coping skills: Skills that help the person figure out what to do when faced with various aversives
Using a “Comparison Model”

- This is something we use to get the big picture
- What do typically developing, well adjusted individuals do when faced with the same problems as persons with disabilities?
- Why isn’t the person with disabilities doing what we do? (skills, abilities, motivation, different histories, current environment promotes and supports the behavior)
- This can also be called a DISCREPANCY ANALYSIS
Comparison Model (Discrepancy Analysis)

- Why doesn’t a non-disabled peer engage in the same behaviors?

- Are there times when the non-disabled peers engage in the exact same behaviors? If so, under what conditions?

- Is the individual’s behavior what could be classified as a **reasonable** response to a **very unreasonable** circumstance?

- If the behavior is not “reasonable” how far away from reasonable is it?
In Closing...

- We all behave in very similar ways
- We are more alike than we are different
- What can we do as behavior analysts to narrow this gap in a manner that is mindful of the level of disability?
For your consideration...

Our Job is not to simply to eliminate behavior, but to help others understand the individual and to help that person navigate the problems of his or her life in a manner that is a little more consistent with society as a whole.

We should not be expected to (and shouldn’t try to) eliminate all of the problems the person faces, instead we should be focused on teaching better methods of handling those problems.
For your consideration...

* If we have done our jobs well, we needn’t worry much about “reduction goals” and we can focus on narrowing the gap (at least somewhat) between how we handle difficult moments and how they are handled by someone with a disability.
THANK-YOU!!!

- This presentation, albeit less flashy, is available on our website at
  - www.pcma.com/foba09.htm
- Contact me at merrill@pcma.com