

Positive Behavior Support Intensive Training



Agenda and Objectives

- Activity start! 9:30-9:45
- 9:50 Hypothesis statement (derived from FBA data)
 - 1 practice activity w/ sample FBA
- 10:15 Developing a plan Function-based intervention
 - DRA, DRO, DRL, DRI
- 10:45 Behavior pathway
 - Case example
- 10 min Break 10:40
- 10:50 Quick review for quality in preparation for afternoon
- Constructing the intervention based on your FBA data and hypothesis data
 - Context/antecedent-based interventions
 - Consequent-based interventions
 - Function-based!
- 11:45 Intro to Building New Skills
- Lunch break 12:00



Create a Task Analysis

• Break down the following skill into a task analysis to support someone who is seeking employment at the Mall of America.

Riding the bus (and/or light rail) from the Mall of America to the DHS Elmer Anderson building

- 1. Work with your group to identify the steps
- 2. Put the steps into a useable format
 - 1. Print off?
 - 2. Picture schedule?
 - 3. App?
 - 4. Map?
- 3. What steps will you use to teach the person to use these tools/steps?
- 4. Report out to the full group



A Functional Approach: Why it is important and how to incorporate it into the Positive Behavior Support Plan



Reviewing/Wrapping up FBA

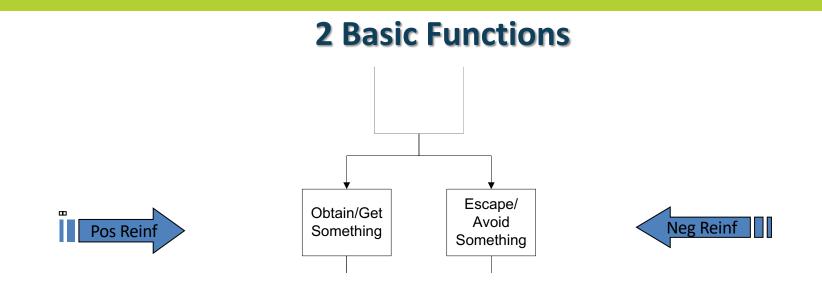
- 245D requirements for FBA (Mn Rule 9544.0040)
 - When is an FBA required?
 - Who is qualified to complete an FBA?
 - What are required elements in an FBA?

https://www.revisor.mn.gov/rules/9544/

https://www.revisor.mn.gov/statutes/cite/245D

• Other settings/funders (e.g., schools, what are the requirements..)

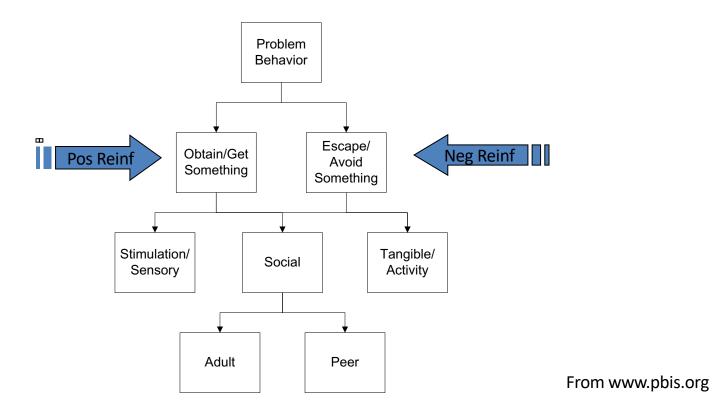




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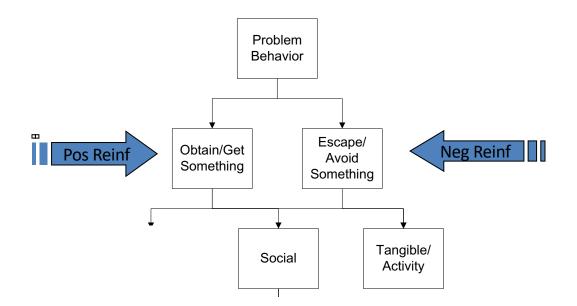


Only 2 Basic Functions





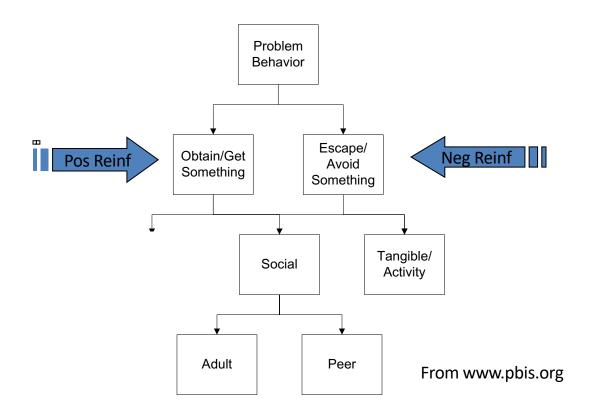
Only 2 Basic Functions (a)



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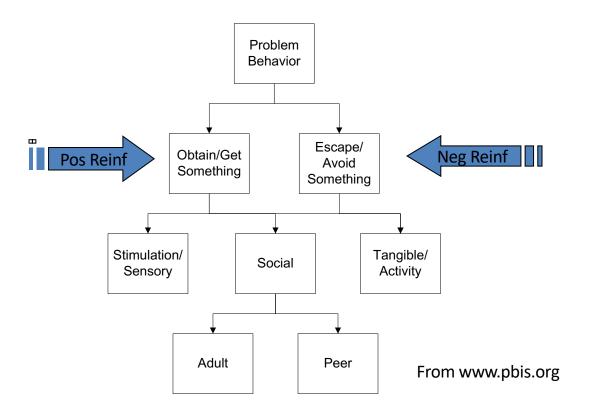


Only 2 Basic Functions (b)





Only 2 Basic Functions (c)





Venn Diagram

Socially Motivated

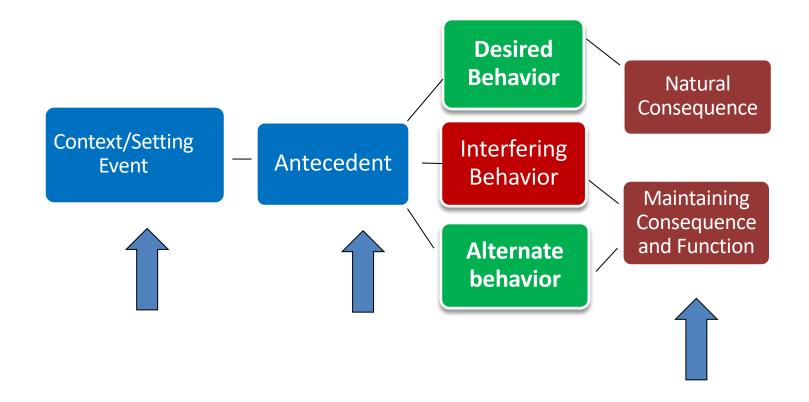
Non-Socially Motivated



	Seeking/Obtain	Avoiding/Escaping
Attention	 Making others laugh Intimidating others or staff Slow transitions between activities because he has to stop and chat 	•Looking away whenever a co-worker asks a question.
Tangibles/ Activities	 Working for a token (can of pop) Wants to have free time 	 Engaging in challenging behavior at the beginning of a work activity to go home for the day Intimidating staff because someone does not want to go on an outing.
Sensory	 Acting very irritable because s/he hasn't eaten yet today Hand-flapping 	 Wants to be kicked out of the room because it's too noisy Won't take medicine because of the way it makes him/her feel



Behavior Pathway





Three Sources of Assessment Data

Indirect Assessments

- Interviews
- Rating Scales
- Checklists

Direct Observation

- C-ABC Recording
- Data Collection

Functional Analysis

 Direct manipulation of environmental variables



Operational Definitions

• Objective

- Measureable
- Observable

• Clear

- Unambiguous
- A bystander could identify it

• Complete

- Identify the limits of the behavior
- Differentiate occurrences from non-occurrences



Operational Definition Practice

With the person next to you try to write an operational definition for the behavior we observed in the video.

Examples: Non-examples:



Example Context/Setting Event Interventions

- Minimize or eliminate the setting event
- Design interventions that are implemented when setting events may be present
- Neutralize the setting event (ear phones in noisy environment)
- Add more prompts for desirable behavior (offer free assistance to lessen aversiveness)
- Increase the value of reinforcement for desirable behavior
- Offer alternative reinforcer (attention during difficult task if learner enjoys attention)



Examples of Rating Scales, Checklists, and Interviews

- Motivation Assessment Scale (MAS)
- Functional Assessment Screening Tool (FAST)
- <u>Positive Environment Checklist</u>
- Functional Behavior Assessment Interview (FBAI)



Direct Observation: C-ABC Recording



C-ABC's of Behavior

- What does C-**ABC** stand for?
- Context-Antecedent-Behavior-Consequence
 - Also includes the context of the situation (this is sometimes referred to as **setting events**)
- Identifies the **how** the behavior **interacts** with the environment



C-ABC Recording: Setting Events

- Setting Events = Slow Triggers
 - Things that may influence the likelihood of a behavior being set off later in the presence of an antecedent



Types of Contexts/Setting Events

Туре	Examples	
Physiological	Pain or discomfort from illness of medication	
Cognitive/Emotional	Fatigue Argument with friends/family	
Physical Environment	Loud noises, Lack of light, too much light	
Social Activity	Presented a difficult task Change in the routine	



C-ABC Analysis Activity

Context-Antecedent-Behavior-Consequence

Context: Events, situations, states of being that may influence the likelihood of a target behavior occurring (e.g., medication change, new staff member starting the team, a change in routine that occurred earlier that day, etc.)

- **Antecedent**: events that happen immediately **before** the target behavior (e.g., an non-preferred task is presented, attention is given to someone else in the room)
- **Behavior**: the target behavior (the behavior being decreased or increased)
- **Consequence**: events that happen immediately **after** the target behavior (e.g., giving someone space, engaging in a calming activity, moving someone or others to a different location)



C-ABC Recording: Antecedent

Antecedent = Fast Triggers

- Events that immediately precede the occurrence of the target behavior
 - Presence of certain adults/peers
 - Being told "**no**"
 - Changes in routine
 - Transitions
 - Presentation of tasks
 - Termination of preferred activities
 - Given feedback about behavior or performance



C-ABC Recording: Consequence

- What event **immediately followed** the behavior?
 - Given a redirection
 - Peers laughing
 - Stern look/glare
 - Avoiding task
 - Talking to peers
 - Getting something that was requested
 - Engaging in activity



We collected C-ABC and the functional assessment indirect assessment information.

Based on this information, we hypothesize that aggression occurs with Jessica that consists of attempts to scratch and kick in situations where attention is being given to others in the environment and she needs to wait. This aggression is likely maintained by access to verbal attention from staff members.

We observed the aggression is more likely to occur on days when there has been a sudden staffing change or when Jessica has not gotten enough sleep.



Hypothesis statement: What your intervention is built around. DIRECTLY INFORMED BY THE FBA

We collected C-ABC and the functional assessment indirect assessment information. Based on this information, we hypothesize that aggression occurs with Jessica that consists of attempts to scratch and kick others (operational definition) in situations where attention is being given to others in the environment and she needs to wait (antecedents). This aggression is likely maintained by access to verbal attention from staff members. (Function!) We observed the aggression is more likely to occur on days when there has been a sudden staffing change or when Jessica has not gotten enough sleep. (Context).



Differential Reinforcement

Why it should be used:

- Positive approach
- Reinforcement-based procedure
- May progressively change behavior
- Able to plan for <u>fading</u> reinforcement and/or natural contingencies



Summary of DR Procedures

	Purpose	Management	Objective
DRL	Reduce behavior to acceptable level	Focus on reducing # of occurrences	Tom will be out of his work area no more than 2 times in 40 minutes
DRO	Reduce behavior to zero occurrences	Focus on increasing time of nonoccurrence	Tom will have no occurrence of leaving his work area in a 40-minute period
DRI DRA	Reinforce a functional alternative behavior	Focus on developing functional alternative behavior	Tom will press a button to indicate he wants to take a break instead of yelling and face slapping

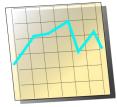


Differential Reinforcement of Alternative Behaviors(DRA)

- Replacement behavior!!
- Reinforce the alternative behavior so the inappropriate behavior decreases



DRA – "How-To"



- Baseline
- If the individual attempts the challenging behavior
 - Ignore (place on extinction) and appropriate behavior is reinforced
 - Inappropriate behavior is interrupted and redirected



DRA criteria



- Alternative behavior
 - serves the same FUNCTION
 - Is more appropriate
 - Requires equal or less effort and complexity
 - Results in same reinforcement
 - Reinforced on the same schedule



DRA - examples

- An individual with autism is reinforced for drawing pictures with colored markers rather than stereotypically flipping the markers or paper in front of himself.
- Reggie is reinforced for clipping his fingernails and biting his fingernails is ignored.



Differential Reinforcement of Incompatible Behavior (DRI)

- Similar to DRA procedure
- Reinforce a behavior that is topographically incompatible with the behavior targeted for reduction
 - Screaming/normal voice
 - On task/off task
 - Running/walking



Differential Reinforcement of Lower Rates of Behavior (DRL)

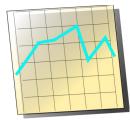
- Schedule used to decrease the rate of behaviors
 - These behaviors may be tolerable or desirable in low rates, are inappropriate when they occur too often or too rapidly
- Examples
 - Sharing in group discussion? AWESOME!
 - But not when you dominate...
 - Making a mistake and leaving your work area without permission? IT HAPPENS...
 - But it's not okay when it happens all the time...



DRL – "How-To"

- Baseline
- Compare the total # of responses in a session with a preset criterion
- Reinforcer is delivered if occurrences are below that criterion
- Can do with the following schedules:
 - Full-session
 - Interval (may be able to increase length of interval)
 - Changing criterion





DRL Guidelines

- Determine baseline but keep taking data
 - The average # of responses can be the initial DRL limit
- Avoid reinforcing too frequently or not enough (but consider the need to fade...)
- Will you give the individual feedback?



DRL - examples

 Jill interrupts an average of 9 times per 30 minute session. If she interrupts no more than 2 times every 10 minutes, she gets a token at each interval



DRI – "How-To"

- Behavior that is incompatible is chosen
 - You cannot do these two behaviors at the same time!
- Baseline
- Choose schedule of reinforcement
 - Thin the schedule
- Reinforce appropriate behavior





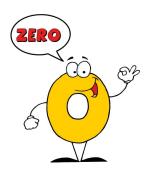
DRI - examples

- Reinforce individuals who are in their seat for meal time because you can't be in and out of your seat at the same time.
- Give Idina a mirror to hold (she loves mirrors) so that she doesn't grab or hit staff transferring her to her wheelchair.



Differential Reinforcement of Other Behaviors (DRO)

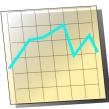
- A reinforcing stimulus is delivered contingent on the target behavior's NOT being emitted for a specific period of time
- Reinforce ZERO occurrences (compared to DRL)





DRO – "How-To"

- Baseline
- Criteria for intervals (how long should they have to have zero occurrences?)
 - Start small, then increase
- What happens if the behavior occurs?
 - Reset the 'timer'?
 - Deliver a consequence or ignore it?
- Reinforcement





DRO - examples

- Rhonda receives a token for each 5 minute interval she goes without engaging in verbal aggression.
 - After 5 successful intervals Rhonda earns 5 minutes of staff attention
- Jaylen receives a chore pass if he does not engage property destruction for one week.



Advantages and Disadvantages of DRO

- Advantages
 - rapidly reduces behavior
- Disadvantages
 - may be a less discriminable contingency for some learners
 - other behaviors may worsen
 - Performance under DRO results in deceleration of the challenging behavior during periods in which DRO is in effect
 - **BUT** target behavior may accelerate at other times.



Summary of Differential Reinforcement Procedures

	Purpose	Management	Objective
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Non-Contingent Reinforcement

- There are limitations to DRO
 - Identifying appropriate intervals
 - implementing with fidelity
- An alternative is non-contingent reinforcement (NCR)
- NCR is the use of positive reinforcement that is not related to the occurrence of a target behavior. It involves delivering reinforcement on a fixed-time schedule independent of whether the individual exhibits the target behavior during the interval.



Non-Contingent Reinforcement (NCR)

- Provides the individual the reinforcer (the one maintaining the inappropriate behavior) independently of the performance of the challenging behavior
- The individual receives the reinforcer at preselected intervals of time and challenging behavior is ignored
- Disassociates the reinforcer from the behavior (and decreases the challenging behavior)





Design a function-based intervention (DRA, DRO, DRL, DRI) based on your hypothesis statement and on the alternative behavior you have selected.

Use the case you used in the morning...Can use Violet case study or stay with own example



Teaching New Skills

• Identify an appropriate communicative alternative that serves the same function as the challenging behavior.

Important considerations of the alternative response:

- The alternative response should be efficient (Occur just as quickly or quicker)
- The alternative response should be less effortful
- The alternative response should result in just as good (or better) reinforcement.







Steps for Teaching New Skills

- Write an operational definition of the appropriate alternative behavior
- MODEL the replacement behavior with examples and non-examples
- PROMPT the individual with reminders, visual cues, etc.
- REINFORCE immediately with specific praise for performance of the appropriate alternative behavior



Prompting Strategies

- **Response prompts:** Assisting the learner to produce the form of a response.
- **Stimulus prompts:** Manipulating materials or aspects of the environment to increase the probability of a response.
- It is important to consider the level of prompting provided:
 - We want to provide the least "intrusive" level of prompting
 - We want to fade prompting and build towards independence and spontaneity of skills
 - We want to consider the age of the person and the context in which we are delivering the prompt
 - To prompt someone with respect



Types of Response Prompts

- Temporarily lessen complexity of skill = e.g., loosen cap of toothpaste so it is easier to open, start with shoelace partially tied.
- Verbal = e.g., "Say help"
- **Gestural** = e.g., Point to an untied shoe.
- **Model** = e.g., Demonstrate how to put the toothpaste on the toothbrush or how to use the cash register.
- Written = e.g., Task list with broken down steps to cross off
- **Visual** = e.g., Task list with broken down visual pictures to pull off of Velcro'ed strip.
- Partial Physical Prompt = Touch a person's hand to physical indicate that a sponge should be picked up.
- Full Physical Prompt = Place a hand over the person's hand and guide the spoon to the person's mouth.



Stimulus Prompts

• Stimulus prompting involves establishing an independent response and then maintaining it under increasingly more difficult circumstances



Sequences of Prompts to Support Acquisition and Prompt Fading: Most-to-Least Hierarchy

Most to Least Prompt hierarchy

- The interventionist provides the least intrusive prompt that consistently results in a correct response approximation
- Across successful opportunities the prompt is faded
- (remember to fade quickly)
- Need some criteria for when to move to a less restrictive prompts.

• Benefits:

- More errorless learning (could lessen likelihood of frustration)
- May be good for harder/more complex/novel skills

• Drawbacks:

- Harder to fade
- Lessen likelihood of spontaneity of new response



Sequences of Prompts to Support Acquisition and Prompt Fading: Least-to-Most Hierarchy

Least to most prompt hierarchy

- The interventionist applies the least intrusive prompt first,
- Then progresses through the sequence of prompts until the learner performs the desired behavior
- Need criteria for when to jump in with prompt.

• Benefits:

- Increased likelihood of independence/spontaneity of the response
- Easy to fade
- Drawbacks:
 - The person may error before receiving prompt, which may increase frustration
 - May lead to error pattern



Stimulus Prompts (cues)

- **Movement Cue** –occurs when an instructor identifies the correct response by pointing, touching or looking at the item.
- **Position Cue** occurs when the target item is placed in a different position than the rest of the items to help elicit the correct behavior.
- **Redundancy Cue-** occurs when one or more dimensions of the target (such as color, size or shape) are exaggerated and paired with the correct response.



Task Analysis

- Task analysis
 - Multiple-step tasks
 - YOU break down the task, then assess an individual's ability to complete each step



Writing a Good Task Analysis

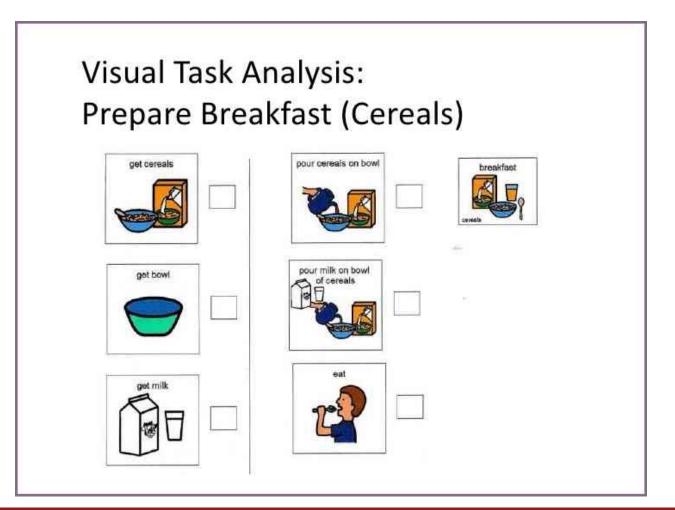
- Know the individual's prerequisite skills
- Be specific with naming of objects
- Quality control-have someone perform the task
- Use action verbs

– Locate, Identify, Put, Place, Identify

 Match the instructions to the functioning level of the individual



Example Task Analysis









Step 1:	Find vending machine room
Step 2:	Identify soda vending machines (SVMs) in vending machine room
Step 3:	Search SVM 1 for desired soda brand (X)
Step 4:	Search SVM 2 for desired soda brand (X)
Step 5:	Search SVM 3 for desired soda brand (X)
Step 6:	Search SVM 3 for cost of Brand X
Step 7:	Search SVM 3 for money slot
-	Does it accept quarters only?
	Does it accept dollars and quarters?
Step 8:	Find change in pocket
Step 9:	Get change from pocket
Step 10:	Examine change for quarters
Step 11:	Get wallet from pocket
Step 12:	Examine bills in wallet for \$1.00 bills
Step 13:	Get one \$1.00 bill from wallet
Step 14:	Put wallet in pocket
Step 15:	Put unneeded change in pocket
Step 16:	Insert money into SVM 3
Step 17:	Select Brand X on SVM 3 button array
Step 18:	Get soda
Step 19:	Enjoy a refreshing beverage
	Step 2: Step 3: Step 4: Step 5: Step 5: Step 6: Step 7: Step 7: Step 10: Step 10: Step 11: Step 12: Step 13: Step 14: Step 15: Step 16: Step 18:

Figure 11.2 Example of a task description for the task of buying a beverage from a vending machine.



Tolerance for Delay

- Used when teaching someone a new communication skill
- Initially the behavior is reinforced each time.
- Over time, the individual is asked to wait increasing amounts of time before reinforcement.
- Helps to shape communication requests to wait for more natural amounts of time.



Group Activity

Add in skill building to get to the "desired, long term" behavior change that we have been talking about... e.g., what will get this person and the people supporting them to being able to grow new skills in this area once the challenging behavior has decreased from the initial alternative behavior.

Use the case you used in the morning...Can use Violet case study or stay with own example



Group Workshop

Please now take the Positive Support Plan that you been making all day, please complete the PBS Plan quality checklist to identify strengths and weaknesses of your/our sample PBS Plan

Breakout rooms will be open people who have been working on their own plans. For people who would like to do the full plan, you can stay in the main room and we will walk through the example plan we have been using today.



LIKE-LEARN-CHANGE



Three Post-it Notes

- What did you LIKE about today?
- What did you LEARN today?
- What would you CHANGE about today?

