SPECIAL NEEDS

BEHAVIOR, FUNCTIONS AND INTERVENTION STRATEGIES

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WORKSHOP OBJECTIVE

Participants will be able to describe what constitutes behavior

Participants will be able to describe behaviors and the role of the environment on behaviors

Participants will be able to measure behavior change and make data informed decisions

Participants will be able to conduct simple behavior analysis

WORKSHOP OBJECTIVE

Participants will be able to determine when to use reinforcement vs punishment

Participants will be able to use select behavior change strategies

MODULES

1. What Is Behavior?

2. Observing and Recording Behavior

3. The ABC Model – Analysis and Uses

4. Functional Behavior Assessments

5. Intentional Strategies to Increase Behaviors Vs Inadvertent Behavioral Increases

MODULES

6. Intentional Strategies to Decrease Behaviors Vs Inadvertent Behavioral Decreases

WHAT IS BEHAVIOR

What is behavior – Behavior is anything a human being does or says. It involves a person's action. VERBS = Behavior; not nouns or labels

It is not just bad behavior

Language, speech, hitting, sleeping, eating, laughing, etc are all behaviors

WHAT IS BEHAVIOR?

Example: Behavior or not behavior

Matthew is angry.

Matthew yelled at his brother

Matthew slammed the door in the teacher's face

Matthew is rude

TARGET BEHAVIOR

Target behavior is the behavior we target for change. It can be:

A behavioral excess – a behavior that we want to decrease or eliminate. Playing with saliva or screaming, etc

A behavior Deficit – a behavior that we want to increase. Using single words, cannot hold a spoon, feed himself, etc

SAMPLE BEHAVIORS

Kwame puts his hands in his mouth

Adjoa plays with saliva

Kojo is not talking

Greg is walks up and down

Kwabena does not sit at the table

Mensah hits himself in the head

Ben bites himself

BEHAVIOR AND THE ENVIRONMENT

Behavior is LAWFUL

Behavior does not just happen - its occurrence is systematically influenced by environmental events

The environment is the person, other people, the physical space around the person

BEHAVIOR AND THE ENVIRONMENT

Once the target behavior is identified, we must identify the current environmental events that control it in order to bring about change

Your response to be behavior be it planned or unplanned has an effect on the behavior – for better or for worse

BEHAVIOR AND THE ENVIRONMENT

Behavioral principles (punishment, reinforcement or extinction) describe the functional relationship between behavior and environmental events

Understanding that environmental events cause behaviors is the right step and helps to learn that changing environmental events change behaviors

The starting point of any intervention is to identify the challenging behavior – Target Behavior

WHEN DESCRIBING BEHAVIOR

Behavior must be/have

- Have a definition – not broad or general. Tantrum?
- Observable and observed over a period of time and in different settings – Home and school, James had a nightmare or woke up svcreaming?
- Measurable – choose measuring tools wisely: clickers, timers, pen and paper. Kwame drinks a lot of water? Kojo cried for a long time
- Inclusion and exclusion criteria
- Agreed upon by the support team – parents, teachers, etc

OBSERVING AND RECORDING BEHAVIORS

Recording behavior is vital to the analysis of behavior

Recording behavior helps us to determine whether intervention is required or not

Recording provides information that helps to determine the best treatment/referral needs

Recording behavior helps to determine whether our intervention has produced the desired change

DATA COLLECTION AND GRAPHING

Continuous Recording: records every instance of the behavior occurring during the observational period. May be frequency, duration, intensity of latency

Product Recording: Recording the tangible outcome or permanent product of the occurrence of behavior

ABC Data recording

THE ABC MODEL - ANTECEDENT

Antecedent: Any event, stimulus change, situations or circumstances that are present immediately before the target behavior

Example 1: Tomi asks Dad to play on his phone and Dad says 'No' but when she asks mom, her mom says 'Yes'

The circumstance under which she gets the phone is when mom is around NOT in the presence of Dad.

Once Tomi learns this, Mom's presence becomes an antecedent for Tomi's behavior of asking for phone

THE ABC MODEL – ANTECEDENT EXAMPLES

Example 1: Teacher called Kwame to come back to class, Kwame immediately slapped himself and started crying.

2. Mary only talks when her Therapist is around

3. The speech therapist said to work with John to practice 3 letter words but he cries and bites himself whenever we bring the workbook out

ANTECEDENT EXAMPLES

4. Kwame starts crying when it is time for his medication

5. We usually do not see behaviors until when the maid tells Betty it is bed time

ANTECEDENT EXAMPLES

Example: When Jeffrey asks for ipad, his teacher looks at the visual schedule and says 'there is no ipad picture on the board yet' and at other times when the ipad picture is on the visual schedule, when Jeffrey asks for ipad; the teacher looks at the board and says 'oh; there is ipad on the board now and hands him the ipad

The ipad picture on the visual schedule becomes an antecedent for Jeffrey's behavior of asking for an ipad

ABC MODEL - CONSEQUENCE

Consequence: Any event or stimulus change occurring immediately after the target behavior

A consequence either strengthens or weakens a behavior. Anything you do or not do immediately after behavior affects the behavior

Example 1: The therapist told me to practice words with Kwame but each time I try, he hits younger ones so we stopped

2. Each time Sean hits himself and bites his wrist, we go to ask what he wants but the behavior keep happening

ABC MODEL - CONSEQUENCE

Example 3: It is Ade's job to clean the dishes after dinner. When Betty tells him to do the dishes, he slaps himself in the face and bangs his head on the wall. As a result, Betty tells him to calm down and go to his room

4. When Kane takes his medication, he spits it out so we have not been giving him

ABC MODEL - CONSEQUENCE

Consequences actually maintain behaviors

The things you do or not do after a behavior have the most impact on the behavior

If you are supposed to say something or do somethings and you didn't, behavior is affected for better or for worse.

Whether it is antecedent, behavior or consequence, all must be recorded.

SAMPLE DATA SHEET

Data Tracking Sheet for Steven G

Instruction: Please fill out this tracking sheet each day you work with Steven.

Date/Time	Staff Name	Behavior	Additional Information
		[ ] Bit himself on the arm [ ] Aggression towards staff/peer [ ] Rectal probing [ ] other: _____	[ ] Aggression? (Incident report) [ ] Self injury? (Incident report) [ ] Body chart completed? [ ] other: _____
		[ ] Bit himself on the arm [ ] Aggression towards staff/peer [ ] Rectal probing [ ] other: _____	[ ] Aggression? (Incident report) [ ] Self injury? (Incident report) [ ] Body chart completed? [ ] other: _____

SAMPLE ABC DATA SHEET

Date	Time	What happened just before the behaviour occurred ANTECEDENT (eg. where the person was, interactions with others, etc)	Describe the BEHAVIOUR (e.g. Joe hit mum with fist 2 times)	What happened AFTER the behaviour occurred – how staff responded and how person responded - CONSEQUENCE	Staff initial

SAMPLE SLEEP CHART – Indicate A when awake and S when asleep

	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Morning							
7am-8am							
8am-9am							
9am-10am							
10am-11am							
11am-12pm							
12pm-1pm							
1pm-2pm							
2pm-3pm							
Total hrs of sleep							
Staff initials							
Evening							
3pm-4pm							
4pm-5pm							
5pm-6pm							
6pm-7pm							
7pm-8pm							
8pm-9pm							
9pm-10pm							
10pm-11pm							
Total hrs of sleep							
Staff initials							
Overnight							
11pm-12am							
12am-1am							
1am-2am							
2am-3am							
3am- 4am							
4am-5am							
5am-6am							
6am-7am							
Total hrs of sleep							
Staff initials							

FUNCTIONAL BEHAVIOR ASSESSMENTS

A process where the controlling variables of a target behavior are investigated and identified

The controlling variables can be behavior functions or other factors:

- Medical/biological considerations - Diabetes
- Diagnosis – Autism, Pica, ADHD
- Medication – Risperidone?

FUNCTIONAL BEHAVIOR ASSESSMENTS

- Hormonal changes – puberty, menstruation, etc
- Physical structure – small space
- Caregiver – right match?
- Peers/siblings - triggers
- Noise level

FUNCTIONAL BEHAVIOR ASSESSMENTS - FUNCTIONS

Attention – seeking to be with others

Escape – seeking to avoid something

Tangible – seeking an item or activity

Sensory stimulation/Automatic reinforcement – seeking sensory input from an item or activity

(SEAT, EATS, EAST)

ATTENTION FUNCTION

Attention: Some behaviors occur because the individual needs attention. Such behaviors are described as 'attention seeking behaviors'.

Examples: Mary is bored in class, she farts or burps, everyone laughs, the teacher yells and reprimands her but the behavior has stopped.

ESCAPE FUNCTION

Escape

- What is escape: the immediate response contingent removal of an aversive condition resulting in an increased frequency of that behavior

  - Example:

- Greg dislikes math class, disrupts the class, and is sent out of the class, Greg is happy to be out of the class

TANGIBLE FUNCTION

Tangible – Access to desired items.

Examples

☐ Jerry asks to watch Sesame street, mum says he should go and finish his work, he started whining and crying so mummy changed the channel to sesame street

☐ Donald steals a toy and enjoys access to the stolen toy

☐ Joshua makes a scene at the Mall so mum gives him a chocolate bar

AUTOMATIC/SENSORY FUNCTION

Sensory Stimulation or automatic reinforcement – The most difficult to deal with

Examples:

- Behaviors that appeal to the senses
- Sexual behaviors
- Humming, not talking even when has words
- Rocking, movement, touch

FUNCTIONAL BEHAVIOR ASSESSMENTS

Conduct an Interview about the problem behavior, the setting of the behavior, the antecedent circumstance, the consequence following the problem behavior, skills that the person has, previous strategies used and results.

Process begins with an assessment of the 3-term contingency

- The antecedents that evoke behaviors
- The consequence that maintains the behavior

FUNCTIONAL BEHAVIOR ASSESSMENTS

Observation of antecedent and consequent conditions – for at least 3 different times

Develop a hypothesis about function of behaviors

Test the hypothesis by manipulating the hypothesized antecedents/reinforcers

INTERVENTIONS - ANTECEDENT STRATEGIES

Pairing: building rapport by combining the learning environment and the caregiver with established reinforcers

Teach functional communication

Set rules and keep them

Reduce/Eliminate boredom

Identify and manage precursor behaviors

INTERVENTIONS - ANTECEDENT STRATEGIES

Task Analysis: breakdown of task into small teachable components

Sample tasks:

- Teeth brushing
- Making a cup of tea
- Doing laundry
- Taking a shower
- Baking a cake

ANTECEDENT STRATEGIES – PROMPTS

Prompt: An additional stimulus that raises the probability of the expected behavior

Could either be:

- Verbal
- Physical
- Gestural

ANTECEDENT STRATEGIES – PREMACK PRINCIPLE

The Premack Principle: if one activity occurs more often than the other, the opportunity to do the most frequent activity will reinforce the less frequent activity

Example, first complete a worksheet and then play on the ipad

ANTECEDENT STRATEGIES - CHAINING

Chaning: Teaching each part of a behavior separately and tying them all together later as one whole.

Types: Forward and Backward Chaining

☐ Forward: teaching from beginning to the end

☐ Backward: teaching from the actual completed task to its beginning. E.g. making sandwich

ANTECEDENT STRATEGIES – MODELLING

The client should be able to copy a model

Complete a task analysis on the target behavior

Present the client with a Model

The Model presents the target behavior step by step

ANTECEDENT STRATEGIES – SOCIAL STORIES

Social Stories: are creative simple and short stories written about social events or situations to help a client/child understand the event or situation. It is a strong teaching tool that works. Examples

ANTECEDENT STRATEGIES – VIDEOS

Client learns a task/Skill from watching a video of the task being performed by a competent peer/Worker

CONSEQUENT STRATEGIES

Strategies to strengthen behaviors: reinforce (encourage) the behaviors you want to see

OTs can assist with identifying and developing preferred tasks, activities and items

Strategies to weaken behaviors: discourage the behaviors you don't want to see

CONSEQUENT STRATEGIES – DIFFERENTIAL REINFORCEMENT

Differential reinforcement means reinforcing only those behaviors that meet a specific criterion along some dimension e.g. frequency, topography, duration, etc.

TYPES OF DIFFERENTIAL REINFORCEMENT

Differential reinforcement of other behavior (DRO): Reinforcer is delivered after interval of time in which challenging behavior did not happen. Example: reinforcing absence of aggression

Differential reinforcement of alternate behavior (DRA): A procedure for decreasing challenging behavior by reinforcing a functionally equivalent alternative. Example: reinforcing requests for breaks instead of aggression to escape

TYPES OF DIFFERENTIAL REINFORCEMENT

Differential reinforcement of lower rates of (DRL): Reinforcing a lower frequency of a behavior which the Learner is expected to have in his repertoire

Differential reinforcement of incompatible behavior (DRI): A procedure where physically incompatible behavior is reinforced to replaced the challenging behavior Example: reinforcing a behavior whose performance prevents the performance of another

CONSEQUENT STRATEGIES – TOKEN ECONOMY

This is a situation where an individual earns generalized conditioned reinforcers (e.g. points, tokens, treat) as an immediate consequence for specific behaviors.

The individual accumulates the tokens over a predetermined period of time and exchanges them for items and/or activities from a menu of back up reinforcers. Examples?

CONSEQUENT STRATEGIES – TIME-OUT

Time-out: is the immediate behavior contingent removal of access to a reinforcer resulting in a decreased frequency of that behavior

Types: Exclusionary and Non exclusionary

- Exclusionary: Individual is <u>completely</u> removed from a reinforcing activity area

- Non exclusionary: Individual is <u>partially</u> removed from a reinforcing activity area

CONSEQUENT STRATEGIES – TIME OUT CONTD.

Works well if implemented properly

Area must be reinforcing for it to work

Timing of time out period: 3-10mins depending on individual, age, situation – discourage staying too long in timeout.

CONSEQUENT STRATEGIES - PENALTIES

Response Cost: This is the contingent loss of tangible reinforcers producing a decrease of the frequency of behavior.

Example: Getting a fine for breaking rules or other fines (losing a treat, or grounding a child, taking a toy away for inappropriate behavior)

Response cost must be tied to an inappropriate behavior and agreed upon by all parties

THANK YOU

Thank you for listening.

BREAKOUT SESSION GUIDED QUESTIONS

What form of behavioral excess or deficit are you dealing with at home/school?

What antecedents do you see before your child's challenging behaviors?

What are some consequences you have or may have implemented following a behavior you dealt with

How do you determine why a child or adult may be doing something?

What do you think is the role of a Speech and Language Therapist?

What do you think about giving medication to someone you care for

What do you think is the role of an Occupational Therapist?

Any other Question?

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