Arielle Reindeau, MS, BCBA, CBIS
Board Certified Behavior Analyst
Neurobehavioral Rehabilitation Supervisor

BEHAVIORALLY REGISTERING
BRAIN INJURY REHABILITATION

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Raise your hand **IF** . . .

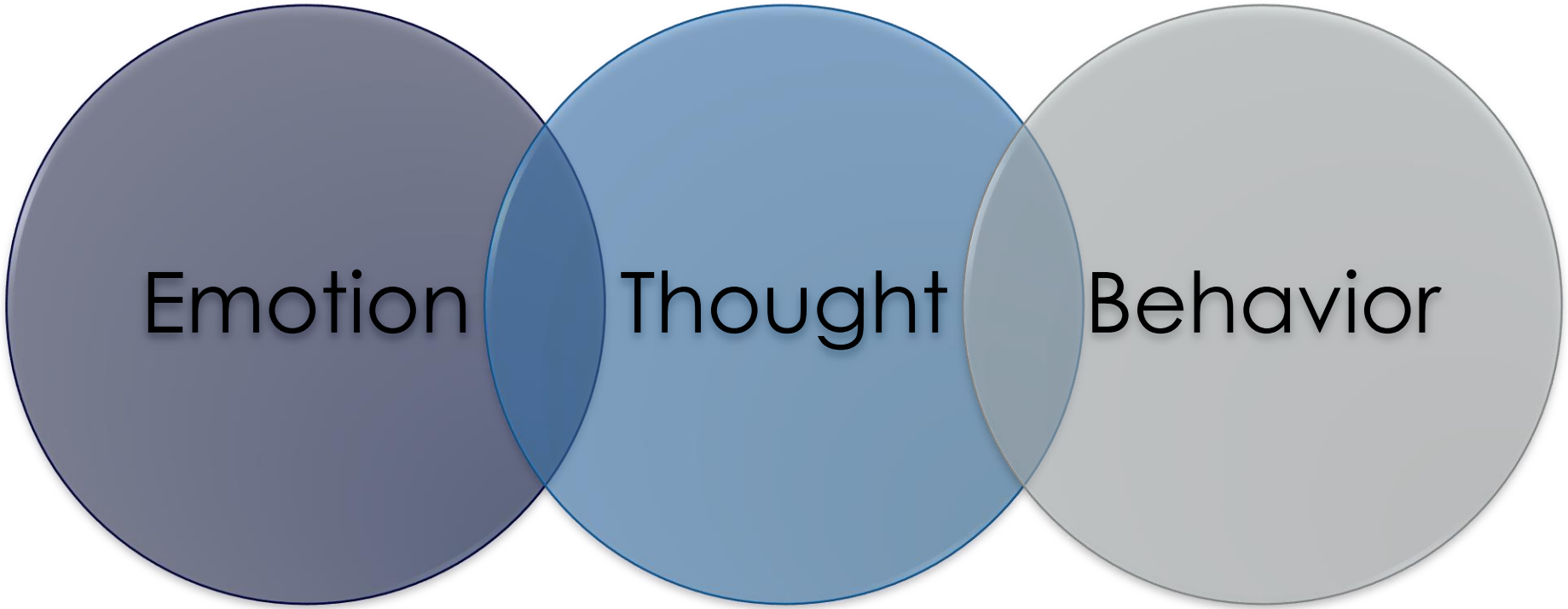
you have ever heard a client say they feel lazy and they want to do more activity, only to refuse your next session

Raise your hand **IF** . . .

you have ever laughed at a joke that a client made and then proceeded to lose most of your clinical time to silly antics

Raise your hand **IF** . . .

your client has ever complained about being "bored" during your sessions and then refused every fun choice you gave them


Emotion
Thought
Behavior

EMOTION	THOUGHT	BEHAVIOR
Anger	I'm done with this crap	Refuses to attend therapy
Happiness	I think everything is going well	Refuses to attend therapy
Sadness	I can't do this another day	Refuses to attend therapy

Raise your hand **IF** . . .

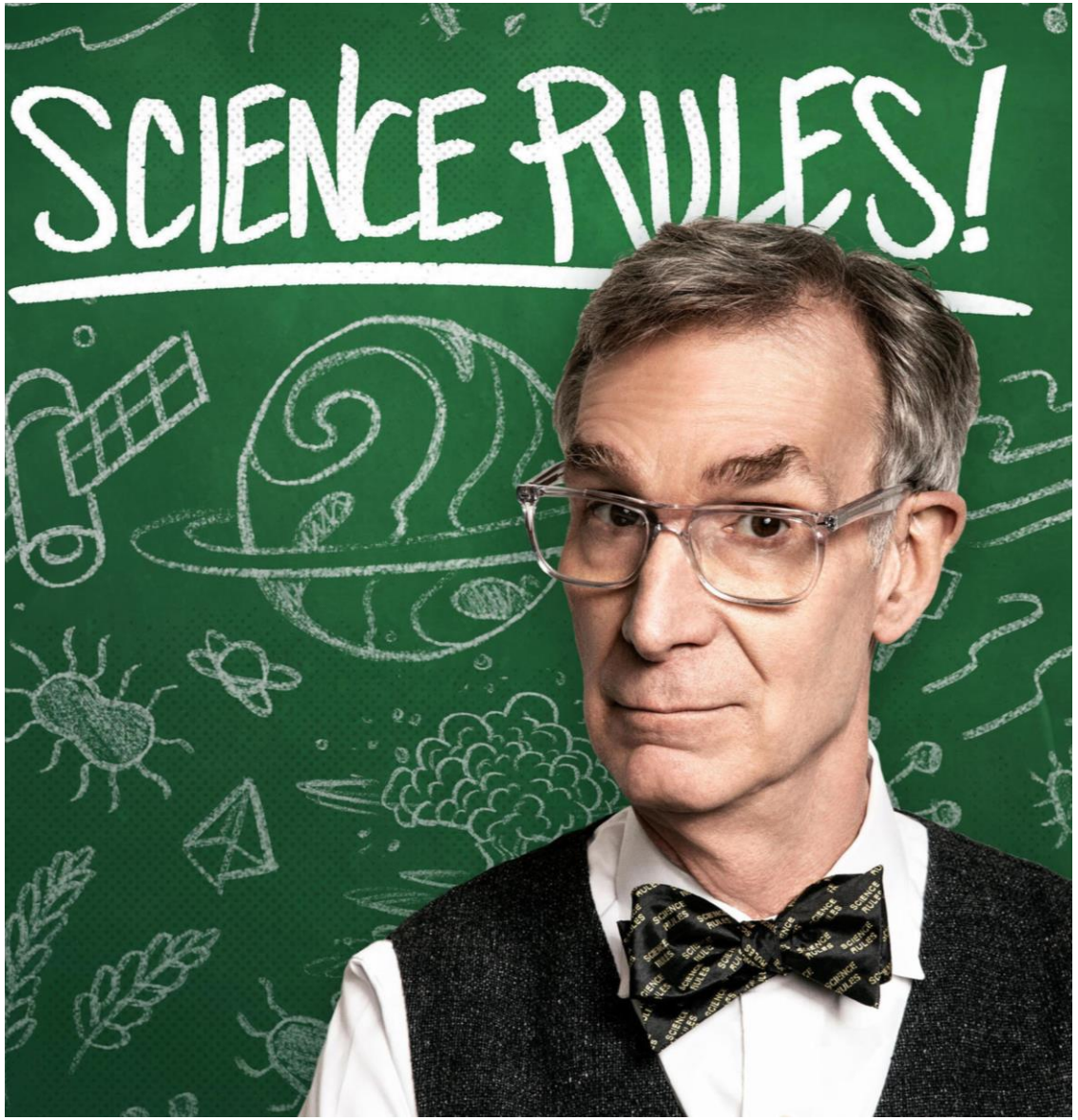
You've had to manage challenging behavior

PRESENTATION OBJECTIVES

- Define Applied Behavior Analysis (ABA)
- Define the bounds of **MORML**
- Analyze the ABC's of behavior
- Define how all behavior **EATS**

“BEHAVIOR ANALYSIS IS THE SCIENCE OF BEHAVIOR[!]…TO DATE, BEHAVIOR ANALYTIC SCIENTISTS HAVE CONDUCTED THOUSANDS OF STUDIES TO IDENTIFY THE LAWS OF BEHAVIOR-”

BACB©, 2020



ABA PRACTITIONERS

ACRONYMS	WHAT IT STANDS FORS
ABA	**Applied Behavior Analysis:** the science of human behavior
Licensed and REGISTERED Clinicians	
BCBA	**Board Certified Behavior Analyst**: Highest degree in ABA – Master's level
BCaBA	**Board Certified assistant Behavior Analyst:** Require supervision by BCBA, able to supervise RBTs – Undergraduate level
RBT	**Registered Behavior Technician:** A clinician who requires ongoing supervision to practice ABA under a licensed practitioner – High School Diploma Level

ACCORDING TO ABA, BEHAVIOR IS…

"that portion of an organism's interaction with its environment that is characterized by detectable displacement in space through time of some part of the organism and that results in a measurable change in at least one aspect of the environment"

(Johnston & Pennypacker, 1993)

WHAT IS BEHAVIOR?

- Behavior is **everything** a person does

- When we define behaviors, we look for **actions** that are:
  - **M**easurable
  - **O**bservable
  - **R**elationship-based
  - **M**ovement-like
  - Done by **L**iving Organism

MEASURABLE

The ability to quantify the action:	
Can measure	**Likely cannot measure**
Walking Eating Whistling	Being anxious Thinking

OBSERVABLE

The ability to see the action:

Can observe	Likely cannot observe
Opening cupboards Yelling Saying F* word	Being hungry Agitation

RELATIONSHIP-BASED

The action cannot exist within a weightless vacuum:	
Actions with context	**Actions in a vacuum**
Wiping nose Flushing the toilet Reading the "wanted" ads	Getting well Feeling a lack of purpose

MOVEMENT-LIKE

The action, like movement, results in displacement:	
Actions with consequences	**Actions without consequence**
Stomping feet Writing letters to .gov Verbally complaining	Being upset Wishing for change

Living Organisms

The action can only be done by a living organism:

Actions by animals	Actions by any *thing*
Rolling in dirt	Getting dirty
Spraying odor on arm	Hoping
Writing wish-list	

Dead Man Test: "If a dead man can do it, it ain't behavior. And if a dead man can't do it, then it is behavior." (Mallot et. al, 2004)

Being anxious

Waving hello

Getting angry

Being behavioral

Snoring

BEHAVIOR OR NOT?
ANSWER **ALL TOGETHER** ON 3!

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ABC'S OF BEHAVIOR

ANTECEDENT	BEHAVIOR	CONSEQUENCE
Occurs *before* the behavior	What the organism *does* **MORML**	Occurs *after* the behavior

(Skinner, 1953)

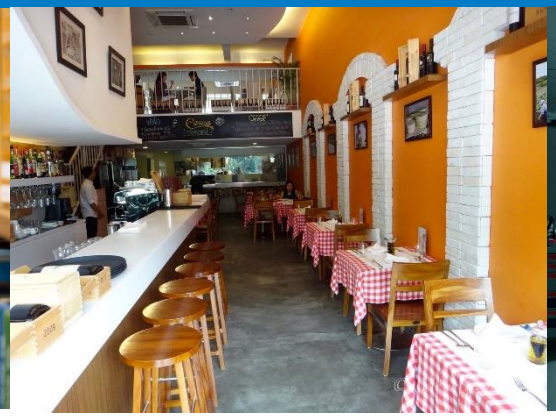
A'S OF BEHAVIOR

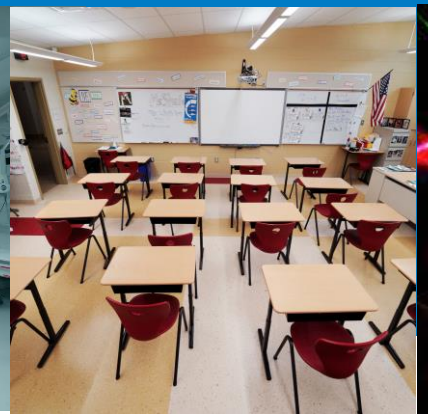
ANTECEDENT
Occurs *before* the behavior Place Time People present

Promotes

situational specificity

where the context shifts the behavior




THE ENVIRONMENT IS AN ANTECEDENT THAT

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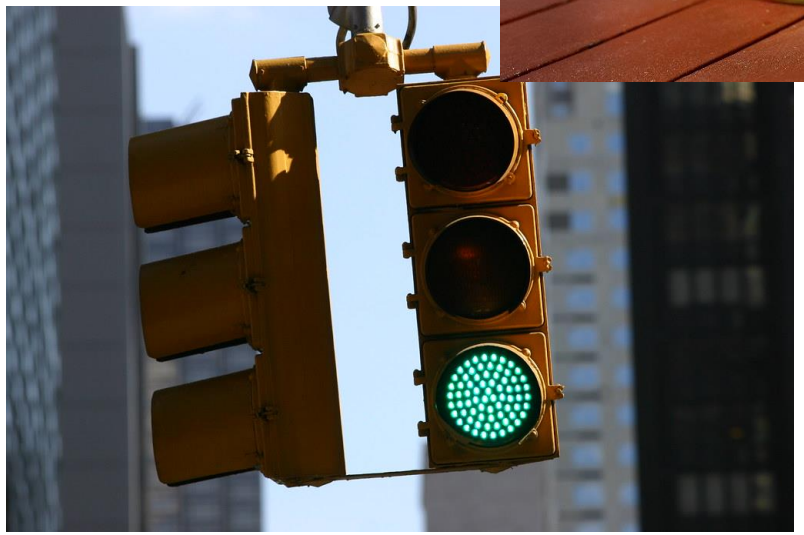
ANTECEDENTS CAN PROMOTE BEHAVIOR



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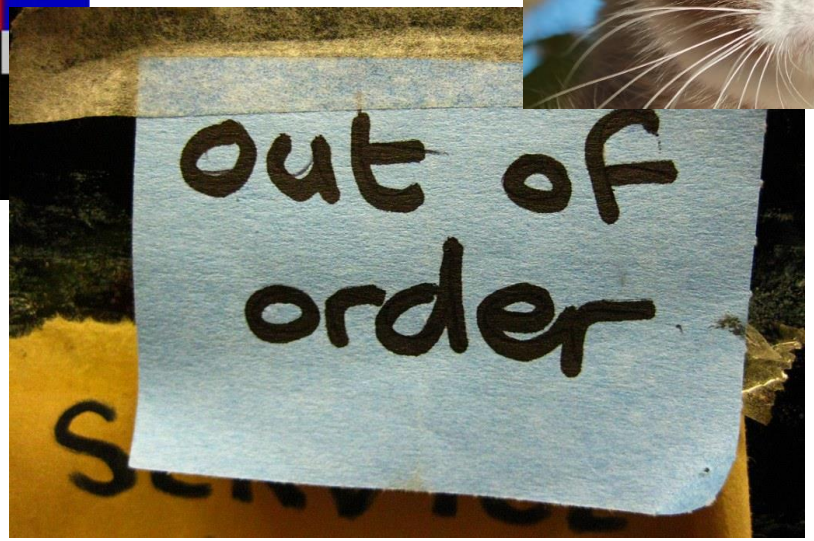
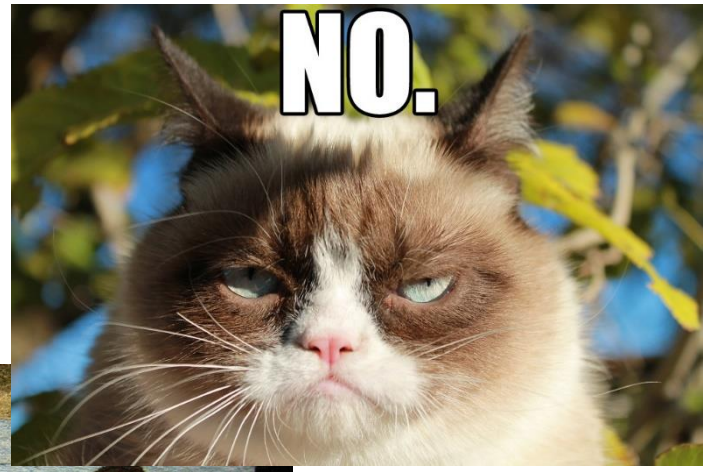
ANTECEDENTS CAN ALSO INHIBIT BEHAVIOR





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MORE ANTECEDENT EXAMPLES

Telemarketer calls	Appliance stops working
Your mother arrives	Your father arrives
Your child runs towards street	Your favorite soda is out-of-stock
Lights turn off	Dog approaches you
Someone says “hello”	Someone tells you “no”

B'S OF BEHAVIOR

BEHAVIOR
What the person *does* Observable Measurable Only 1 instance

OPERATIONALLY DEFINING BEHAVIOR

Create a

comprehensive

qualitative description

of the behavior

OPERATIONAL DEFINITIONS

Four major characteristics;

1. Observable characteristics are all defined
2. Readable and unambiguous
3. Complete – delineate all boundaries
4. Repeatable

OPERATIONAL DEFINITION EXAMPLES

Refusals

Any instance of patient physically or vocally protesting participation in an activity or demand presented by staff. Refusals can occur in regards to therapy, cares, following safety recommendations, or other part of the rehab process. Refusals occur 2 minutes after the demand is placed. If patient vocally refuses but then engages in the activity DO NOT count as an occurrence.

OPERATIONAL DEFINITION EXAMPLES

Touching medical equipment

Any instance of patient using upper extremity to make contact with trach, c-collar, g-tube or IV line without prior permission from staff. Patient may make contact with or without item in hand. If you need to block patient movement or redirect hands, please count as an occurrence.

OPERATIONAL DEFINITION EXAMPLES

Unsafe Movements

Any instance of patient ambulating without cues or in a way that makes it difficult for staff to properly support his weight. Unsafe movement and transfers are most likely to occur when patient is fatigued or refusing to move. Unsafe transfers and movement begins when patient moves without a cue or moves in a way that is not allowing staff to support his weight, it ends when patient is transferred to an appropriate surface (bed, mat, chair, etc.).

BETTER DEFINITIONS

= *BETTER DATA*

A key to managing behavior is objectively understanding it ☺.

Data collection allows us to SEE the impact as we change the antecedents or consequences.

C'S OF BEHAVIOR

CONSEQUENCE
What occurs *after* the behavior Who changed? What changed? How?

CONSEQUENCES

Can *reinforce* ↑ or *punish* ↓ a behavior

		(+)	(-)
REINFORCEMENT ↑	→ **FOLLOW THE SAFETY PLAN** →		
PUNISHMENT ↓	→ **ENGAGE IN UNSAFE MOVEMENTS** →		

CONSEQUENCES

All behavior

Escape
Attention
Tangible
Sensory

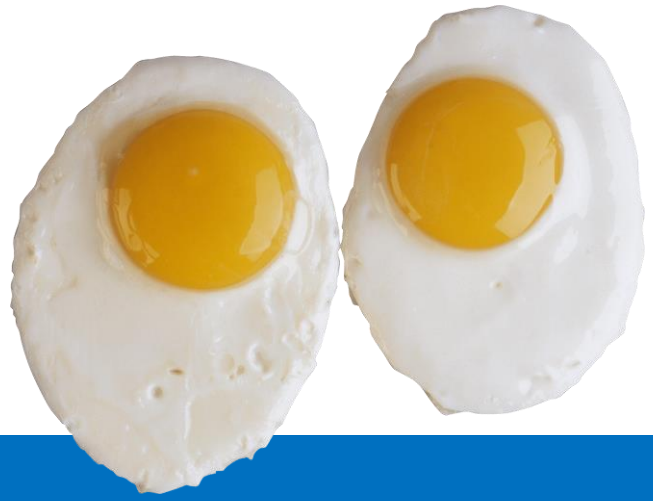
REPEATED CONSEQUENCES

that reinforce and maintain behavior
and are called the
function(s) of the behavior

(Iwata, 1994)

ESCAPE (AVOIDANCE)

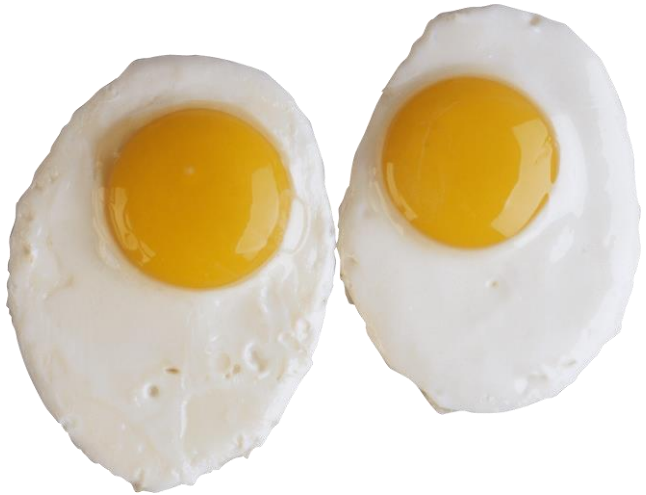
A	B	C
Pill hidden in dog treat	Dog spits out treat & pill	Human picks up item and huffs



ESCAPE

A	B	C
Therapist places demand	Client requests bathroom	Therapist brings client to bathroom

A	B	C
Time to wake up for ADLs	Patient lays in bed without movement	Staff tell patient "we will get you up after Mr. X"



A	B	C
Therapist provides client feedback for safety	Client begins to ask unrelated questions	Therapist answers unrelated questions

Attention

A	B	C
Owner on couch	Dog begins to bark and grab toy	Owner says "you silly little lady" & begins to play with toy

Attention

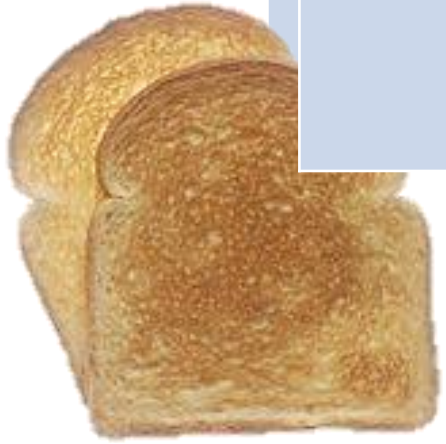
A	B	C
Staff pass client room	Client yells "help me"	Staff enter room

A	B	C
Client in public space	Client begins to curse	Staff and family stare at client

A	B	C
Client playing game with distracted family member	Client licks playing card	Family looks at client and says "ew"

TANGIBLE

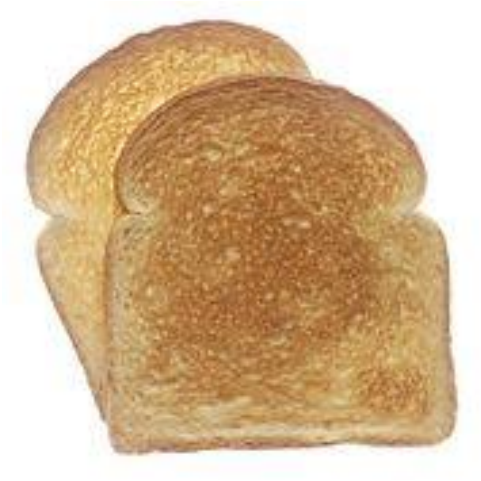
A	B	C
Owner home from work	Dog barks and paws at food bowl	Owner delivers dinner



TANGIBLE

A	B	C
Phones at nurse's station	Client begins to request to use phone	Staff hand client phone

A	B	C
Mealtime	Client refuses staff help and selects food	Client gets all the yums ☺



A	B	C
After client rest period time	Client flails body at bed and cries	Staff put client back in bed

Sensory

A	B	C
Dog in home	Dog rubs butt on carpet	Owner's soul → ☹ (Dog receives sensory input)

Sensory

A	B	C
Stitches on head	Client scratches at wound site	Site bleeds

A	B	C
Client in session	Client begins to pick nose	Sensory input for client's nose

A	B	C
Client in wheelchair	Client rocks back and forth	Sensory input for client body

A→B→C

Visitor walks in → "hello"→ visitor smiles

Red skin → itch → scratch marks on skin

At store →stand in line → get ticket

Escape, **A**ttention, **T**angible or **S**ensory

ANSWER **E** ,**A**, **T** OR **S** ALL TOGETHER ON 3!

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ABA AND BEHAVIOR

- Behavior is everything a person does

- Applied Behavior Analysis (ABA) is a science that seeks to understand the laws around human behavior

ABC'S OF BEHAVIOR

ANTECEDENT	BEHAVIOR	CONSEQUENCE
Environments create **situational specificity** Antecedents can PROMOTE or INHIBIT behavior	**M** **O** **R** **M** **L**	**Reinforce** (increase) or **punish** (decrease) the <u>FUTURE</u> likelihood of a behavior

(Skinner, 1953)

CONSEQUENCES

All behavior

Escape
Attention
Tangible
Sensory

Watson 1913	Behaviorism Stimulus-Response Psychology
Skinner 1930	Experimental Analysis of Behavior Methodological/Radical Behaviorism Stimulus-Response-Stimulus
Fuller 1949	Applied Behavioral Analysis *Operant conditioning of a Vegetative Human Organism*
BACB Established 1998	

HISTORY OF APPLIED BEHAVIOR ANALYSIS

ROLE OF NEUROBEHAVIORAL REHABILITATION SUPERVISOR

Credential: Board Certified Behavior Analyst (BCBA)

Responsibilities at Craig Hospital:

Collaborate with treatment team to create plans	Manage escalated and dangerous patient events	Educate staff on behavior management	Run support team that assists with challenging patients

Behaviorally registering rehab includes finding clinicians licensed in ABA to add to your current practice!

Q & A or more ABA?

Q&A

Arielle Reindeau, MS, BCBA, CBIS
Neurobehavioral Rehabilitation Supervisor
Craig Hospital
Englewood, CO

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1	2	3
See what the Neurobehavioral Program does at Craig Hospital	Brief overview of steps to creating a behavioral strategy/plan	Review patient case study related to use of ABA

1

WHO WE ARE

Ari Reindeau, MS, BCBA, CBIS
Neurobehavioral Rehab Supervisor
X 8125

Dave White, MHA, RBT, CNA
Behavior Specialist – Days
X 8753

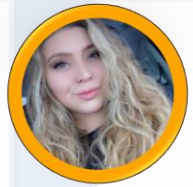
Karen Fouts, MPH, RBT, CNA, CBIS
Behavior Specialist – Evenings
X 8718

Clhavinzky Laguatan, RBT, CNA
Behavior Specialist – Weekend Days
X 8102

Liv Criddle, BCBA
Inpatient Neurobehavioral Rehab Coordinator
X 8188

No Name, RBT, CNA
Behavior Specialist – Day Shift
X ????

Raevyn Goates, BA, RBT, CNA , CBIS
Behavior Specialist – Evenings
X 8701



Rae Manzanares, RBT, CNA
Behavior Specialist – Weekend Evenings
X 8453

CRAIG'S ABA-BASED NEUROBEHAVIORAL PROGRAM

EST. FEB 2020

2 Board Certified Behavior Analysts*

6 Registered Behavior Technicians*

Support staff for behavior 7 days a week*

12 hours of ABA-related training in orientation for all clinical staff*

Advanced training for staff on BI floors

Individualized behavior plans and behavior data

* = OCCURRED AFTER FEB 2020

WHAT DO WE DO

- Implement Behavior Intervention Plans
- Behavioral Support, call X 7500
- Behavior Check-In
- Patient Behavior Data
- Teach Safety-Care®
- Co-Treats
- IOA – Inter Observer Agreement

BEHAVIOR INTERVENTION PLAN (BIP)

Who has a BIP?

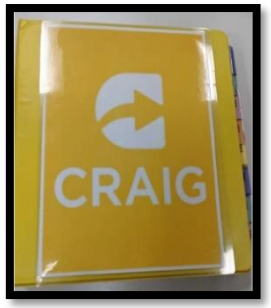
- Yellow tag on the patient's door

- Yellow flag by patient picture on EPIC

- Discussed during shift report

Where can I find the BIP?

- Yellow binder at the Nurse's Station



- Patient's room
  - Locked drawer – "0000", then turn knob
  - With BA on clipboard

- EPIC
  - "CRHBIP" in the search bar

PARTS OF THE BEHAVIOR PLAN

KNOWN PREFERENCE

ABOUT ME

HEADING

KNOWN TRIGGERS

BEHAVIORS TARGETED FOR DECREASE & INCREASE

SAFETY

BEHAVIORAL RESPONSES/ REACTIVE STRATEGIES

HOW TO SET UP FOR SUCCESS

HEADING

- Staffing structure: BA, Share, Team
- When the BIP was Initiated and last updated

STAFFING STRUCTURE:	MORE INFO?
1:1 Behavioral Attendant	Contact Neuropsychologist (x****)
PLAN UPDATED:	**PLAN INITIATED:**
//**	**/**/**

DATA COLLECTION: ☒15 M Data Sheet ☐ABC Data ☒RL6 for Dangerous Behavior

ABOUT ME

- Personality
- Psychosocial Information
- Brain Injury Basic

ABOUT ME
Luke was full-time employed as a custodian at Denver Public Schools. His wife describes him as a busy body who always needed something to do. Patient's injury is in his frontal lobes which makes it difficult to control his emotions, tone, and behavior.

BEHAVIORS TARGETED FOR DECREASE & INCREASE

- Behaviors to Decrease
- Behaviors to Increase
- Asterisk (*) means more info

BEHAVIORS TARGETED FOR DECREASE	BEHAVIORS TARGETED FOR INCREASE
Unsafe actions (throwing, slamming tray, etc.)*	**Calm hands/body**
Inappropriate comments (cursing, name-calling, bark orders)*	**Practicing PAUSE steps***
Touching Medical Equipment (belt, g-tube, etc.)	

KNOWN TRIGGERS

- Events that happen before problem or mal-adaptive behaviors we are concern about

SAFETY

- History of Behaviors (at most 30 days old)
- BA guidelines
- Body positioning
- Safety Protocols

HOW TO SET UP FOR SUCCESS

- Environment
- Interactive Structure
- Technology
- Family Visits

KNOWN TRIGGERS	
Triggers include but are not limited to:	
• Family • Lock Belt • Toileting needs	• Pain • Too many demands at once • Staff not responding to his words

SAFETY
• **BA should be with patient at all times – even if family is present**   ○ Attend classes if therapist requests it – must do pick up and drop off to all • Remove all items from counter top, patient has tendency to throw items when upset. • Patient has flipped over his wheelchair – check anti-tip bars • Grab extra staff (3+) for all commode transfers and cares in bed

HOW TO SET UP FOR SUCCESS	
ENVIRONMENT	• Set up items to be presented on patients' left side • Patient requires sticky mat and foam holder.
INTERACTION SCTRUCTURE	• Sessions should clearly define how many repetitions of a task will be performed ○ Draw boxes on a white board of how many times he will have to do things
TECHNOLOGY	• Patient may use room phone to contact wife after therapies until 10 PM
FAMILY VISITING	• Wife may visit patient between 4-7 PM each day

BEHAVIORAL RESPONSES/ REACTIVE STRATEGIES

- If the patient displays certain behaviors, how staff responds

KNOWN PREFERENCE

- What we use to motivate the patient

BEHAVIORAL RESPONSES/REACTIVE STRATEGIES	
PATIENT BEHAVIOR	**STAFF BEHAVIOR**
Practicing PAUSE Steps: During transfers the patient skips a PAUSE step	• Stop the patient from continuing with transfer • Go back to initial PAUSE step • Continue from beginning of PAUSE • Repeat until patient completes PAUSE steps in correct order
Unsafe Actions: Patient begins to perform an unsafe action like slamming tray, throwing items, or other actions that could cause harm	CALL ADDITIONAL STAFF IMMEDIATELY • Prompt patient to engage in safer behavior - "Take three deep breaths for me" - "Open and close your hands for me" - "Squeeze this pillow for me" • If patient complies with request, praise patient - Ask patient open-ended question such as, "how can I help you?" • If patient does not comply, make sure patient is safe - Remove all obvious signs of attention - Once patient shows calmer behavior attempt prompts again
Inappropriate Comments: Patient begins to curse at staff, call staff names, make requests in a rude manner, bark orders at staff, and/or raise volume when demand is placed by staff.	DO NOT RESPOND TO BEHAVIOR • Position self to be near exit • When patient is calmer, Indicate to patient current task - "Luke, it is time for X" • Remove all forms of attention (comments, eye contact, physical touch) • Wait for patient to decrease signs of escalation • Represent demand (it may be necessary to change wording)

KNOWN PREFERENCES
The following list can be used across patient day for structured activities:
• Bubbles • Tickles • Back rubs • Warm blankets

DATA COLLECTION

- 2 types of data collection we use
  - ABC
  - Scatterplot
- Anyone can take data
- Data is taken for patients who have a BA (1:1)
- The BA is required to take data on patient's behavior

ABC Data

ANTECEDENT	BEHAVIOR	CONSEQUENCE
What happened before the behavior? List as much detail as possible	Describe the behavior – how did it look? How many times did it occur?	List all steps that were taken after the behavior occurred? Who/what moved or changed and how?

Scatterplot Data

TIME/DATE:	✓	1. Behavior #1	Behavior #1 may include:	2. Behavior #2	Behavior #2 may include:	3. Behavior #3
7:00 AM						
7:15 AM						
7:30 AM						
7:45 AM						
8:00 AM						
8:15 AM						
8:30 AM						
8:45 AM						
9:00 AM						
9:15 AM						
9:30 AM						

ABC DATA

ANTECEDENT What happened before the behavior? List as much detail as possible	BEHAVIOR Describe the behavior – how did it look? How many times did it occur?	CONSEQUENCE List all steps that were taken after the behavior occurred? Who/what moved or changed and how?
Tech w/ pt and sister in bistro. Pt asked for 3 deserts. Sister said he could choose 1.	Pt called sister a "bitch" and tried to hit her.	Sister ignored and stepped away.
Pt in room, playing card games w/ tech, mom, & sister	Pt licked card	Mom said "ew" and sister laughed
Pt laying in bed	Pt pulling at external	Tech says "hold this, please," and hands pt a stuffed toy

Antecedent – happens BEFORE Behavior

- Location
- People present
- Activity
- Demands placed
- Time of day
- Pain
- Noise, lights, etc

Behavior

- Compliance
- Refusals
- Yelling
- Screaming
- Aggression
- Attempts to get out of bed/chair
- etc

Consequence – happens AFTER behavior

- Praise
- Ignoring behavior
- Staff stepping away
- Restating demand
- Redirection

SCATTERPLOT DATA

Date: June 17, 2021 Doctor: _____ Room #/Patient Initials:_____ Observer: _____

Shift: Day Evening Night

Reasons for BA: PTCS, Impulsivity and/or impaired executive functions imposing safety risks for patient and/or staff (fall risk)

Behaviors for data collection: 1.) Behavior 1 2.) Behavior 2 3.) Behavior 3 4.) Behavior 4

Direction: Please shade in the box, if one or all behavior occurs in 15 minute increments

TIME/DATE:	✓	1. Behavior 1		2. Behavior 2		3. Behavior 3		4. Behavior 4
7:00 AM			**Behavior 1** may include any instance of patient		**Behavior 2** may include any instance of patient		← **Behavior 3** may include any instance of patient	
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
9:00 AM								
9:15 AM								
9:30 AM								
9:45 AM								
10:00 AM								
10:15 AM								
10:30 AM							→ **Behavior 4** may include any instance of patient	
10:45 AM								
11:00 AM								
11:15 AM								
11:30 AM								
11:45 AM								
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12:30 PM								
12:45 PM								
1:00 PM								
1:15 PM								
1:30 PM								
1:45 PM								
2:00 PM								
2:15 PM								
2:30 PM								
2:45 PM								

PLEASE LOOK AT LAST PAGE FOR INSTRUCTIONS

The Header

The Grid

Instructions on last page

Fill in check marks

Behavior does not occur while patient is observed

Data not taken, patient unobserved

Behavior observed…

Small boxes are left blank

TIME/DATE:	✓	1. Verbal Aggression		2. Throwing		3. Unsafe Movements	
7:00 AM	✓		**Verbal Aggression** may include: Any instance of patient cussing at staff, cussing at activities, calling staff names, etc. Verbal aggression includes single words or sentences. An example of verbal aggression would be patient saying "bitch" when asked a question. A non-example of verbal aggression would be patient saying "fuck yeah!" in response to "do you like chocolate?"		**Throwing** may include: any instance patient propelling any item away from self and not into an appropriate receptacle. Patient may throw items at another person, on the ground, or on another surface. An example of throwing would be patient tossing fork on the floor when they are done eating. A non-example would be the patient tossing their napkin into the trash after eating.		**Unsafe Movements** may include: any instance of the patient attempting to get out of bed or wheelchair, transfer themselves, or wrapping their fingers in their lock belt or Guldmann sling.
7:15 AM	✓						
7:30 AM	✓						
7:45 AM	✓						
8:00 AM							
8:15 AM	✓						
8:30 AM	✓						
8:45 AM							
9:00 AM							
9:15 AM	✓						
9:30 AM	✓						
9:45 AM	✓						
10:00 AM	✓						
10:15 AM		X		X		X	
10:30 AM		X		X		X	
10:45 AM							
11:00 AM	✓						
11:15 AM							
11:30 AM							
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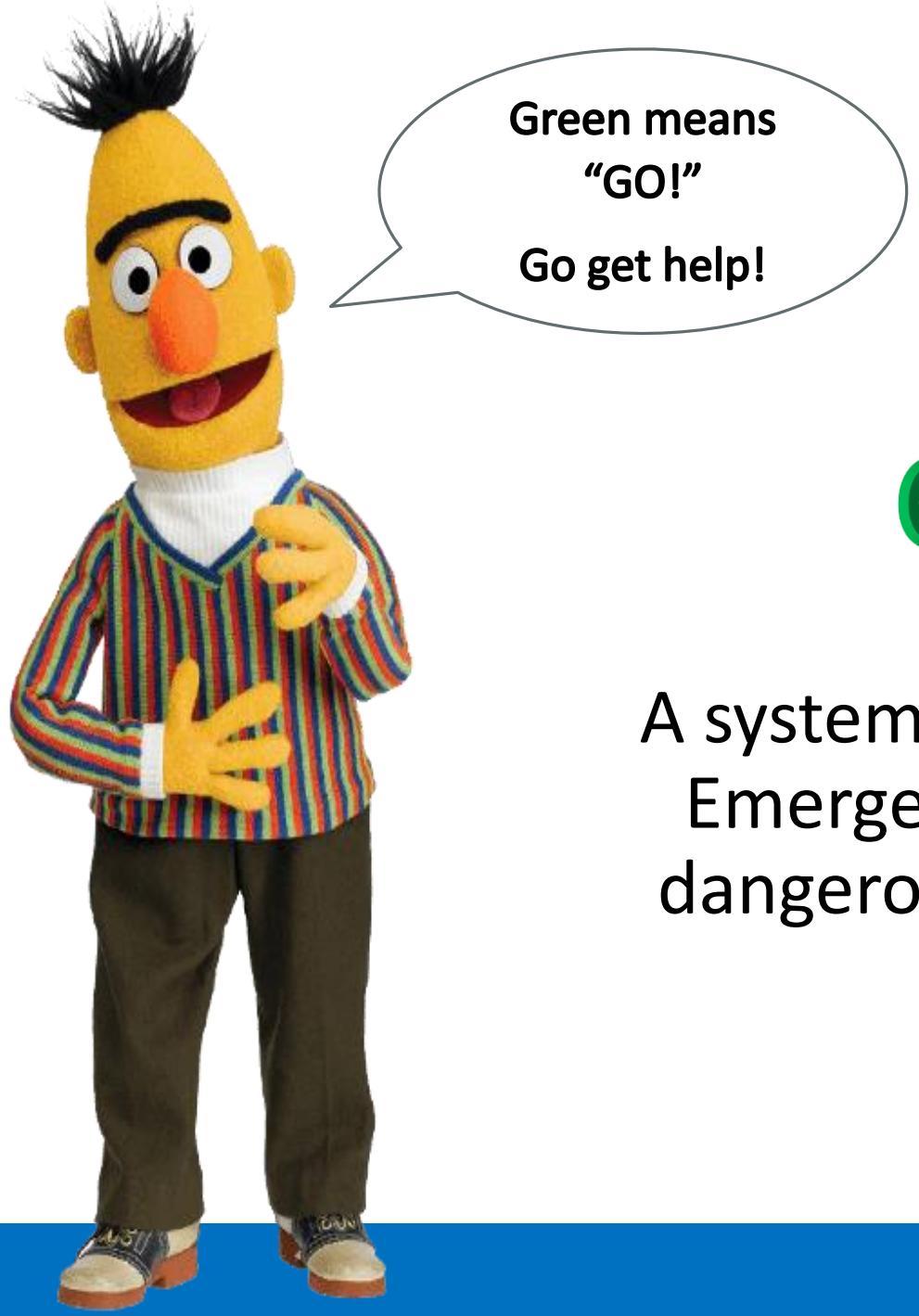
12:15 PM	✓						
12:30 PM	✓						
12:45 PM	✓						
1:00 PM							
1:15 PM							
1:30 PM							
1:45 PM							
2:00 PM		X		X		X	
2:15 PM							
2:30 PM	✓						

DATA MUST BE COLLECTED HOURLY

Data taken later is often incorrect. Please take data as soon as you are able. **If you are unable to collect data within the hour, please "X" out the time slots (as if you were not with patient)**

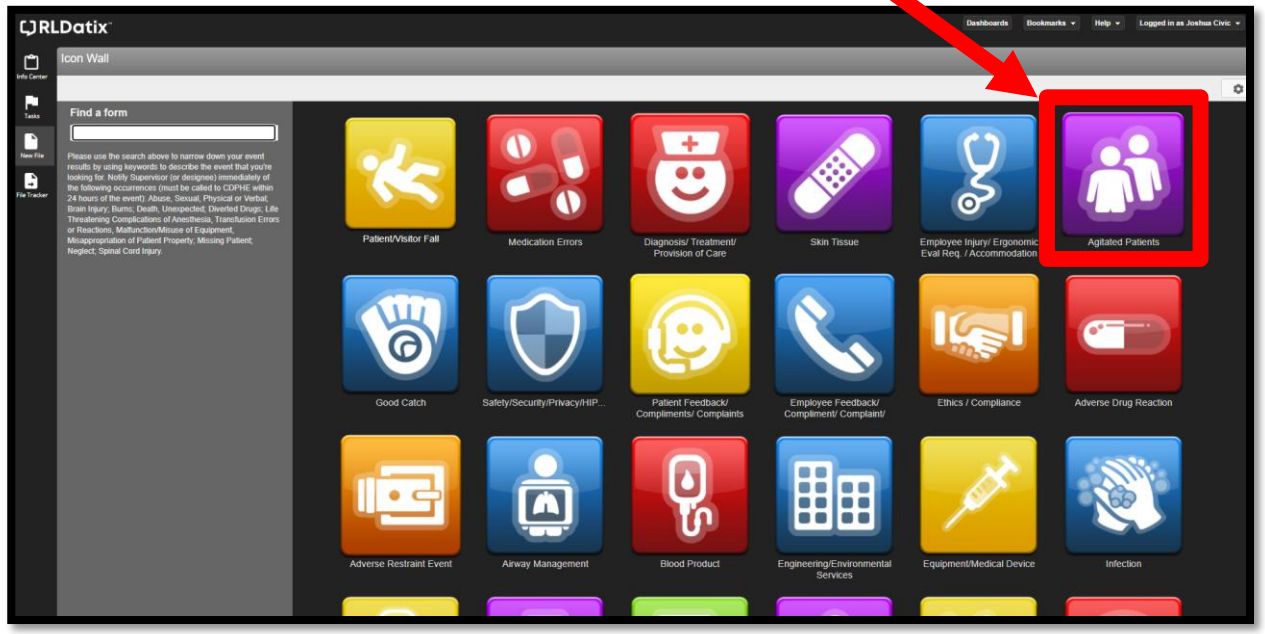


CODE GREEN

A systematic response of the Behavioral Emergency Response Team (BERT) to dangerous and very dangerous patient behavior

AGITATED PATIENT REPORTS

Report If
Something does not go as planned and becomes risky
Behavior Plan is not working
Injury/possibility of Injury
Security called to assist
New problem behaviors
When in doubt, fill one out!



2

STEP ONE:
DEFINE YOUR BEHAVIOR

- What does the behavior look like?
- When does it usually occur?
- When does it start?
- When does it stop?
- Example of it
- NON-example of it

BEHAVIORAL DEFINITION EXAMPLE

Hair picking includes any instance of:

- **Topography:** Using hands to remove a small part of my hair from the larger strand.
- **Start:** Hair picking begins when I pick strand up and begin to look at hair for split ends.
- **Stop:** Hair picking ends when I do not touch hair for at least 30 seconds

BEHAVIORAL DEFINITION EXAMPLE

- **Context:** Hair picking most commonly occurs in the car, on my couch and during zoom meetings
- **Example:** An example of hair picking is stopping at a red light, picking up an individual strand of hair and pulling off split ends one at a time
- **Non-example:** A non-example of hair picking includes be being on my couch and picking fuzz out of my hair

STEP TWO:
TAKE REAL-TIME DATA

- ABC’s of behavior
- Frequency
- Duration
- Inter-response time
- Time-sampling

DATA COLLECTION EXAMPLES

ABC's of Hair Picking	Frequency of hair picking	Duration of hair picking	Inter-response time of hair picking	Time-sampling of hair picking
Write all antecedents prior to HP	Number of hairs picked	Total amount of time spent picking hair	Time between each HP occurrence	**Partial-interval:** indicate each time interval where behavior occurs at all
Write all instances/ topography of HP				**Whole interval:** indicate if behavior occurs during whole time interval
Write all consequences of HP				**Momentary:** Indicate if behavior occurs at specific interval

STEP THREE:
HYPOTHESIZE A FUNCTION

- Escape?
- Attention?
- Tangibles?
- Sensory?
- MULTIPLE!?

HYPOTHESIZING THE FUNCTION EXAMPLE

HYPOTHESIZED FUNCTION: Sensory

A	B	C
Stopped at red light	Begin to pull at split ends, holding with L hand, picking with R hand	Ends pull apart from hair strand

A	B	C
Sitting on my couch re-watching episodes of *Grey's Anatomy*	Begin to pull at split ends, holding with L hand, picking with R hand	Ends pull apart from hair strand

A	B	C
Sitting on zoom meeting	Turn off camera Begin to pull at split ends, holding with L hand, picking with R hand	Ends pull apart from hair strand

A	B	C
Alone in home waiting for friend to arrive	Sit on couch Begin to pull at split ends, holding with L hand, picking with R hand	Ends pull apart from hair strand

STEP FOUR:
THINK OF NEW BEHAVIOR THAT CAN BE A FUNCTIONAL ALTERNATIVE

Something in the repertoire

Something that is just as simple as the challenging behavior to do

Behavior that gets the same consequence

Behavior that IMPROVES your life ☺

FUNCTIONAL ALTERNATIVE EXAMPLE

A	B	C
Stopped at red light	Begin to pull at split ends, holding with L hand, picking with R hand	Ends pull apart from hair strand

OTHER BEHAVIORS
Fidget spinner
Crocheting
Pushing a button

STEP FIVE:
SCHEDULE REINFORCEMENT FOR THE NEW BEHAVIOR

Something you know how to do

Something that is just as simple as the challenging behavior to do

Behavior that gets the same consequence

Behavior that IMPROVES your life ☺

REINFORCEMENT EXAMPLE

A	B	C
Stopped at red light	Engages with fidget spinner	Fidget spinner turns **&** **Provide self with chocolate**
Sitting on my couch re-watching episodes of a known		
Sitting on zoom meeting		
Alone in home waiting for an event		

STEP SIX:

SELECT A RESPONSE TO YOUR CHALLENIGNG BEHAVIOR

- Can’t escape?
- No attention?
- No access?
- Blocked sensory experience?
- MULTIPLE!?

REACTIVE STRATEGY EXAMPLE

REINFORCEMENT

↑

A	B	C
Stopped at red light	Engages with fidget spinner	Provide self with chocolate

PUNISHMENT

↓

A	B	C
Stopped at red light	Engages in hair picking	Immediately pull over Braid hair 5x in a row

STEPS TO YOUR BEHAVIOR PLAN SKELETON

Define	Write a definition
Data Collection	Take real-time data
Hypothesize	Take a guess at the function
Pick an Alternate	Function-based
Reinforce your Alternate	Make it enjoyable
React to your Challenging Behavior	Pick a realistic strategy that you can do

HOW DO YOU FILL IN THE MEAT?

APPLIED BEHAVIOR ANALYSIS (ABA)

- Evidence-based science that seeks to understand human behavior in order to:

INCREASE ADAPTIVE BEHAVIOR

DECREASE CHALLENGING BEHAVIOR

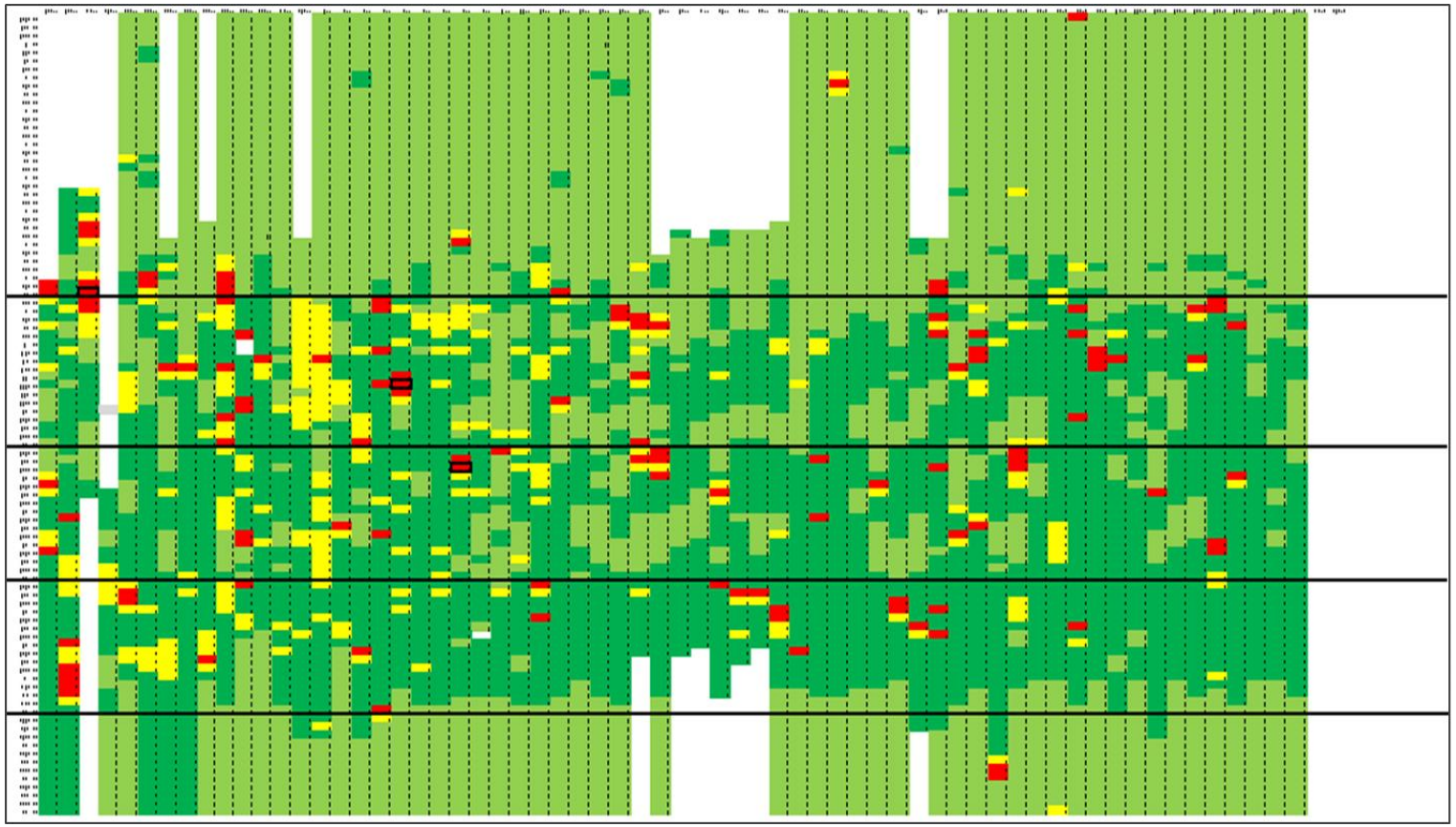
(Iwata, 1994)

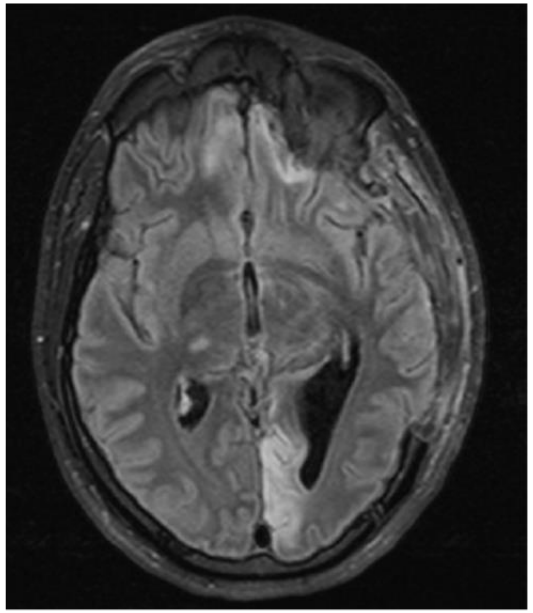
3

CASE STUDY 1

Male patient, age 27, injured during tailgating event. Patient suffered a significant injury to the bilateral orbitofrontal region of his brain (see image below). 24 Hour data was collected using a red, yellow and green scale. The Y axis indicates time of day, the X axis indicates date, and dark horizontal lines indicate medication intervals. Green indicated time asleep (light green) or time with appropriate and adaptive behavior (dark green). Yellow indicated an increase in agitation; screaming, cussing, tapping foot. Red indicated engagement in severe problem behavior; throwing, spitting, hitting, and engaging in vocal threats. Utilizing the principles of differential reinforcement, patient was able to de-escalate within a smaller time frame and engage in coping strategies regularly. Patient was discharged to another facility.

CASE STUDY 1

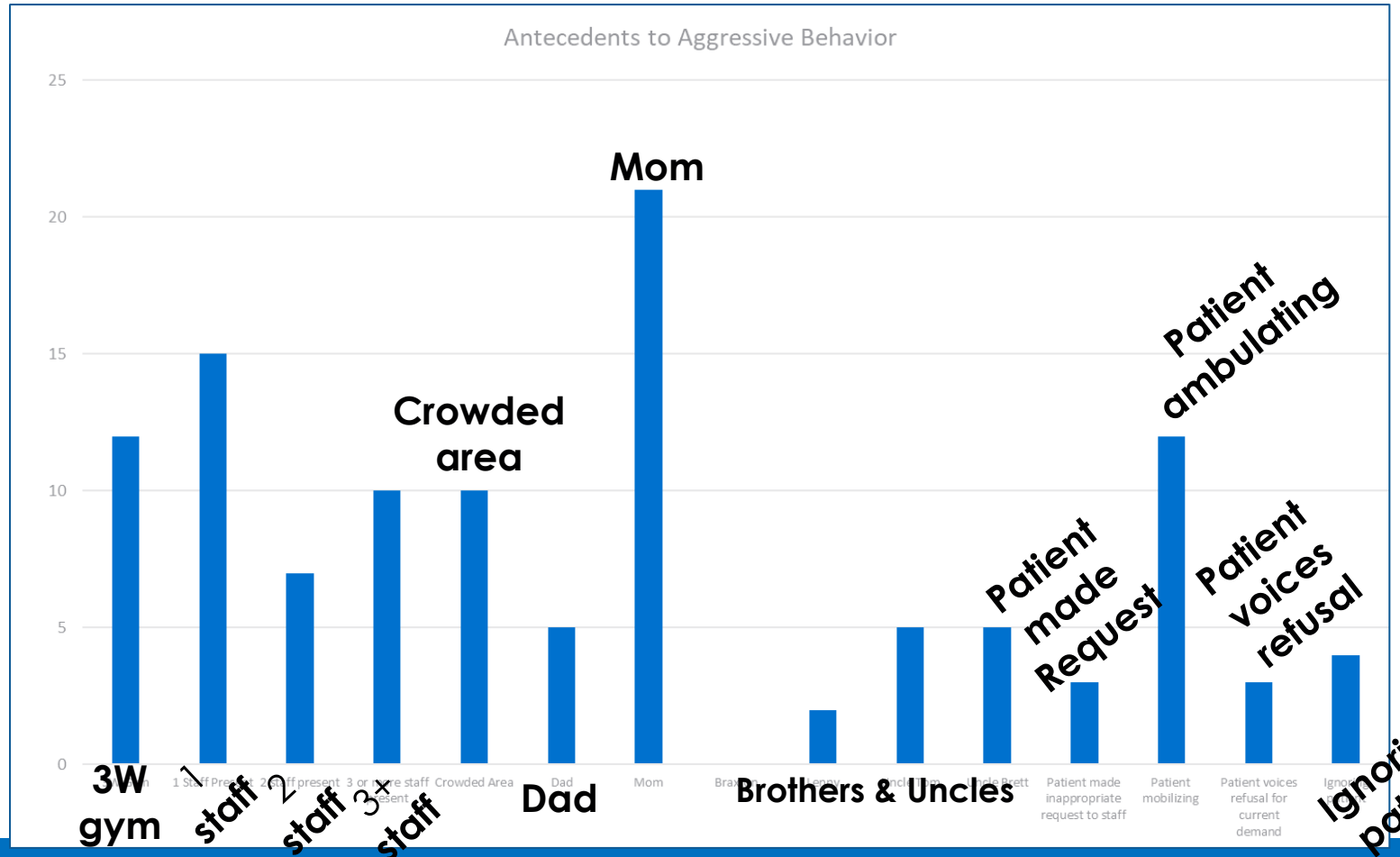


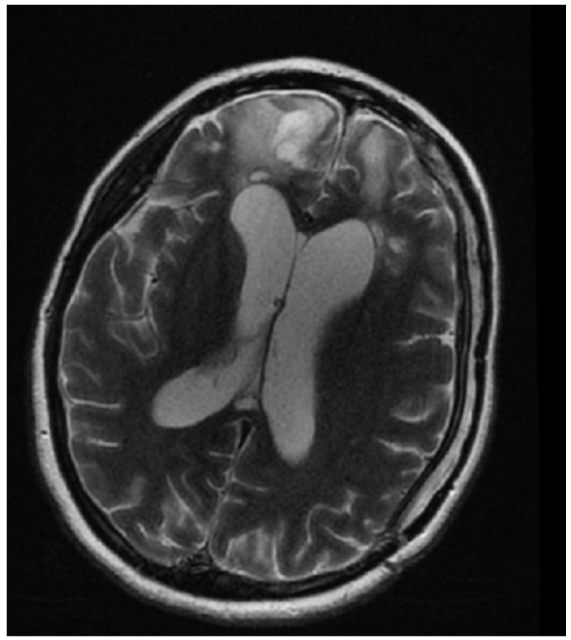


CASE STUDY 2

Female patient, age 20, injured during motor vehicle accident. Patient suffered a significant injury to the bilateral orbitofrontal region of her brain (see image below). Patient engaged in aggressions during treatment sessions and nursing cares. Antecedent, behavior, consequence (ABC) data was collected to indicate which variables were present in the environment before episodes of aggression. Having only 1 staff present, demands to mobilize and presence of mother were rated as the variables with the strongest correlations to aggression. Treatment team utilized this information to restructure physical therapy session and increase safety for patients and staff. Patient was discharged to another facility.

CASE STUDY 2

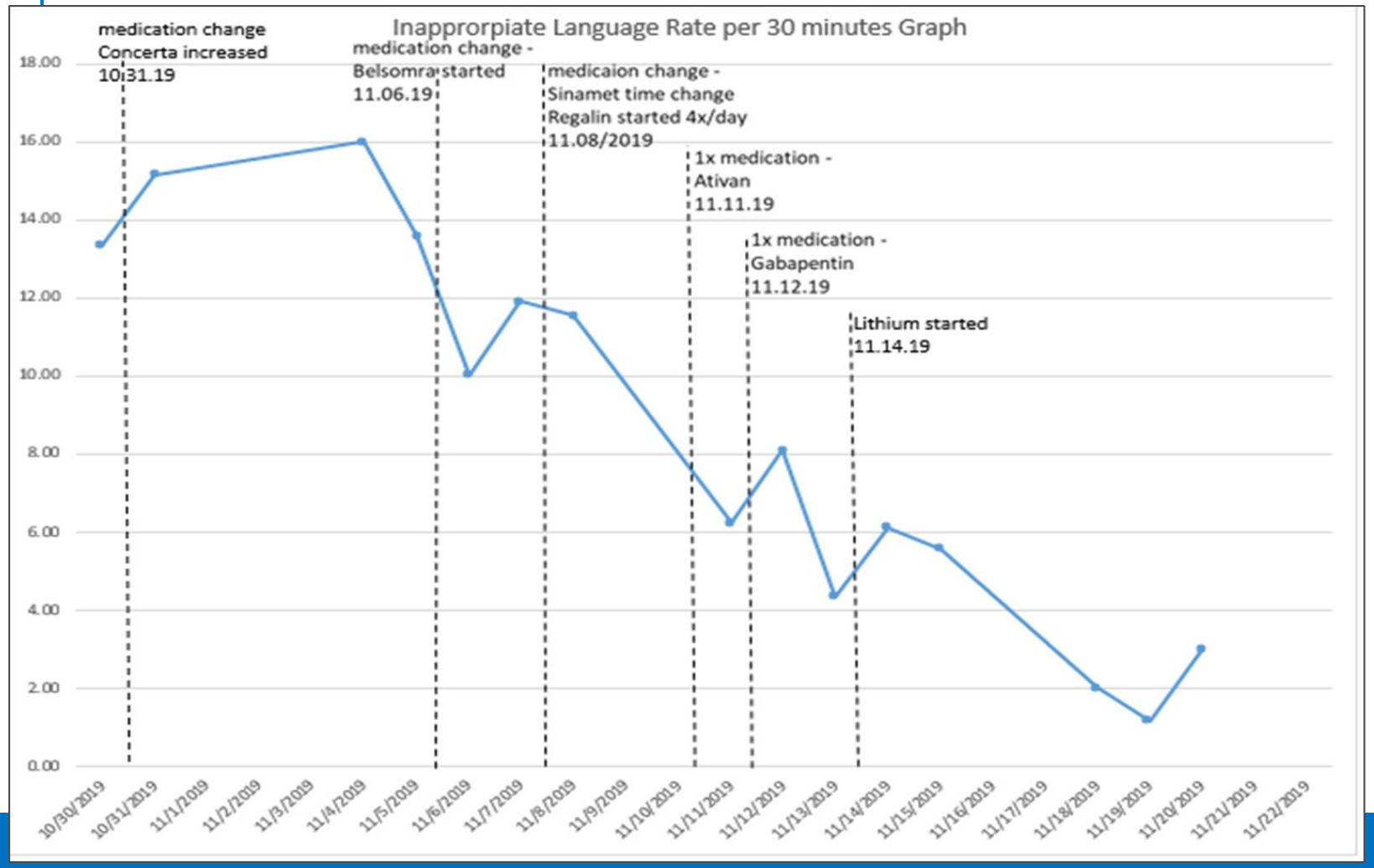

Antecedents to Aggressive Behavior
25
20
15
10
5
0
Crowded Area
Dad
Mom
Patient made inappropriate request to staff
Patient mobilizing
Patient voices refusal for current demand
Mom
Crowded area
Patient ambulating
Patient made Request
Patient voices refusal
3W gym
1 staff
2 staff
3+ staff
Dad
Brothers & Uncles
Ignoring patient



CASE STUDY 3

Male patient, age 18, injured during longboarding accident. Patient suffered contusions in the bi-frontal and temporal regions of his brain, and the MRI indicated shearing injuries in both hemispheres. (see image below). Patient engaged in inappropriate language which interfered with his abilities to communicate and maintain socially appropriate behaviors. Patient worked Monday through Friday with Behavior Specialists (RBTs) in response stopping protocol. Rate of inappropriate language drastically decreased over a 2 month period.

CASE STUDY 3


Inapprorpiate Language Rate per 30 minutes Graph
medication change
Concerta increased
10.31.19
medication change -
Belsomra started
11.06.19
medicaion change -
Sinamet time change
Regalin started 4x/day
11.08/2019
1x medication -
Ativan
11.11.19
1x medication -
Gabapentin
11.12.19
Lithium started
11.14.19
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
10/30/2019
10/31/2019
11/1/2019
11/2/2019
11/3/2019
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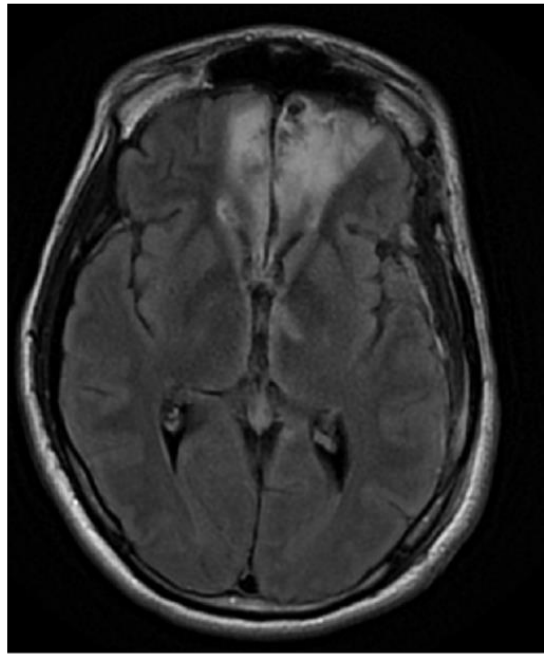

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