

How to Think Like a Behaviorist

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DS-ASD Consultant

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Objectives

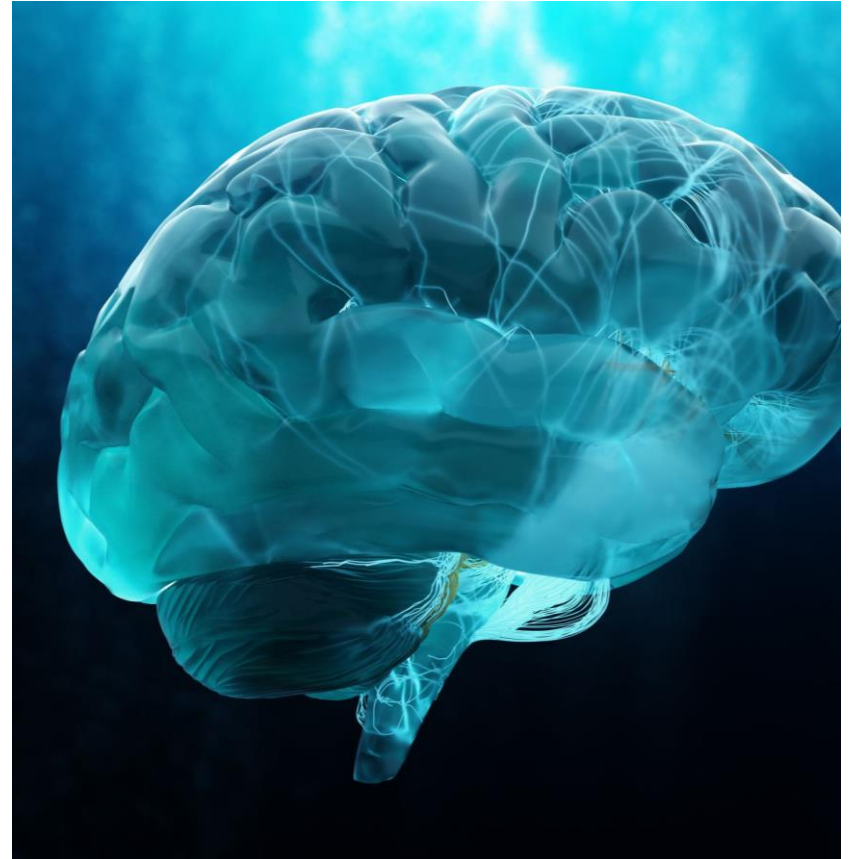
- ✓ Explore functions of behaviors specific, how to do detective work to determine triggers and setting events that might be leading to behaviors.
- ✓ Learn about proactive strategies and supports and how to use them effectively to support the child.
- ✓ Identify target behaviors, recognize what setting events and triggers could be contributing to these, and understand how to come up with viable take home strategies.

Brains of Individuals with Down syndrome

- At or just before birth, the brain of an individual with Down syndrome is almost indistinguishable from the brain of individuals without any genetic anomalies
- Neuropathological differences begin to show after 3–5 months of age and demonstrate definite differences by 6 months.
- Once mature, the brains of people with Down syndrome are about 20% smaller than average and have fewer neurons, as well as abnormal connections between cells.

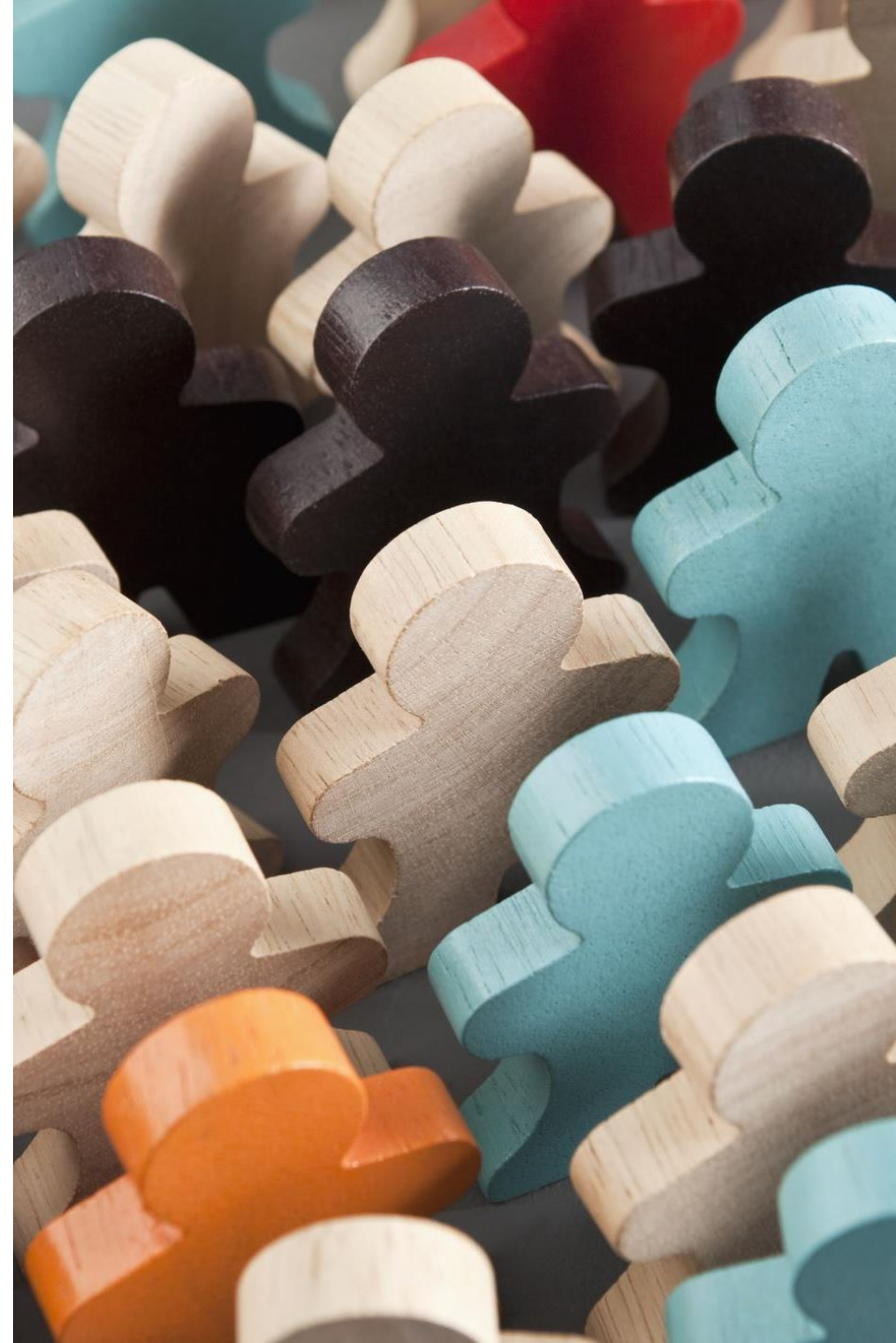
Areas of the Brain that are Affected

- Areas of the brain that seem to have differences in volume or circuitry include:
 - **Hippocampus** which is responsible for memory and learning
 - **Prefrontal Cortex** responsible for higher level cognitive tasks such as planning, decision making, problem solving, personality expression, modulation of social behaviors, inhibition, etc.
 - **Cerebellum** responsible for coordination of movement and learning, as well as attention and language.



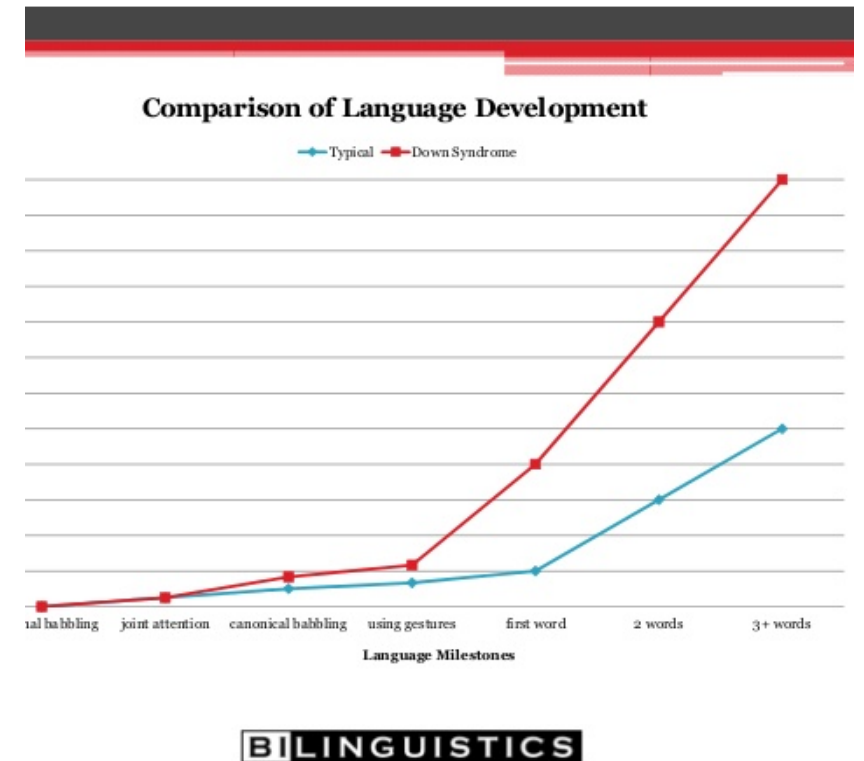
Probabilistic Behavioral Phenotype

More likely to show one or more of these characteristics or behaviors, but this does not mean every child will display these characteristics or behaviors.



Neurological Differences + Typical Changes

Children with Down syndrome still go through the typical stages of development on top of having these neurological differences. In the research world, this is a “developmental approach”.



Additional Setting Events

Setting Events Checklist				
Student: _____		Respondent: _____		
Behavior Interest: _____		Date: _____		
Instructions: The list below includes events that could possibly increase the likelihood of problem behavior occurring. If an event contributes to the student's behavior, check the appropriate column to indicate when the event occurs in relation to when it contributes to the problem behavior. For longstanding influences, note only those that contribute to the current incident or behavior.				
SETTING EVENT (by type)	Same Day	Day Before	Within Week	Long Standing
Physical				
Meal time change or meal missed				
Sleep pattern (including duration) atypical				
Medications changed or missed				
Appeared or complained of illness				
Appeared or complained of pain or discomfort				
Allergy Symptoms				
Seizure				
Chronic health condition				
Other (specify):				

Date/ Time	Setting Event	Antecedent	Behavior	Consequence	Severity (1 - 5)
3/22 8:30am	<input checked="" type="checkbox"/> Lack of sleep <input type="checkbox"/> Peer conflict <input type="checkbox"/> Lack of food <input type="checkbox"/> Pain/illness <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> T prompt <input type="checkbox"/> T correction <input type="checkbox"/> Alone <input type="checkbox"/> Other:	verbal aggression	<input checked="" type="checkbox"/> T attn <input type="checkbox"/> Tangible <input checked="" type="checkbox"/> Escape <input type="checkbox"/> Peer attn <input type="checkbox"/> Other: reprimand	5 yelling, swore
3/22 9:15am	<input checked="" type="checkbox"/> Lack of sleep <input type="checkbox"/> Peer conflict <input type="checkbox"/> Lack of food <input type="checkbox"/> Pain/illness <input type="checkbox"/> Other:	<input type="checkbox"/> T prompt <input checked="" type="checkbox"/> T correction <input type="checkbox"/> Alone <input type="checkbox"/> Other:	verbal disruption	<input type="checkbox"/> T attn <input type="checkbox"/> Tangible <input checked="" type="checkbox"/> Escape <input type="checkbox"/> Peer attn <input type="checkbox"/> Other: work removed	4 yelling
3/23 8:15am	<input checked="" type="checkbox"/> Lack of sleep <input type="checkbox"/> Peer conflict <input type="checkbox"/> Lack of food <input type="checkbox"/> Pain/illness <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> T prompt <input type="checkbox"/> T correction <input type="checkbox"/> Alone <input type="checkbox"/> Other:	throws pencil + paper	<input type="checkbox"/> T attn <input type="checkbox"/> Tangible <input checked="" type="checkbox"/> Escape <input type="checkbox"/> Peer attn <input type="checkbox"/> Other: head down w/ hood	4
3/26 9:00am	<input type="checkbox"/> Lack of sleep <input checked="" type="checkbox"/> Peer conflict <input type="checkbox"/> Lack of food <input type="checkbox"/> Pain/illness <input type="checkbox"/> Other:	<input type="checkbox"/> T prompt <input type="checkbox"/> T correction <input checked="" type="checkbox"/> Alone <input type="checkbox"/> Other:	said "I'm not doing this"	<input checked="" type="checkbox"/> T attn <input type="checkbox"/> Tangible <input type="checkbox"/> Escape <input type="checkbox"/> Peer attn <input type="checkbox"/> Other: assigned as hwk	1

Summary: After 2 weeks of data collection, it appears that having slept less than 8 hours is associated with increases in the frequency and severity of Tobias' escape/avoidance problem behaviors (verbal aggression and disruptions), often lasting throughout the morning.

How Does This Knowledge Intersect with Behavior?

- Higher demand versus ability to cope
- Chronic higher state of anxiety (fight or flight) due to incomplete data
- Higher frequency of behaviors due to higher rate of exhaustion on internal resources
- More likely to engage in distraction strategies when tasks are too difficult or un motivating
- Less motivation to show what you know
- Highly rewarded by social attention compared to everything else
- **Challenging Behaviors=Communication of a mismatch between the child and something in their environment.**



So What?

Behaviors occur with the context of a situation, but also occur within the context of neurodevelopment and chronic issues. Understanding that better prepares us to find a more meaningful solution.

Compensatory Strategies to Address Neurodevelopment and Setting Events

To help set your child up for success

Visual schedules and “first-then” directives

Break down tasks into smaller components

Use a multimodal approach to teaching including modeling (Learn by “doing”)

Turn the abstract into something concrete

Limit visual/auditory overstimulation

Prespecified reinforcer

Preferred item as a distractor

Offer an adult directed choice

Teach emotion regulation

Tell the child what *to* do instead of what “not” to do

Use strengths and interests to engage

Give time to process

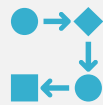
Errorless learning

Visual Roadmap

Components of a Schedule



“What do I do?”





“How much work needs to be done?”









































“When am I finished?”







“What happens next?”

<h2>First</h2>  <p>$2 + 4 = 6$ magnetic numbers</p>	<h2>Then</h2>  <p>ball bounce</p>
--	--

 wash	 bath
 toilet	 pajamas
 get dressed	 milk
 breakfast	 story
 brush teeth	 bedtime

My Schedule & Check-In			
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 
	just right voice 	in my space <input type="checkbox"/>	yes  no 



Types of Schedules

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Errorless learning

Visual Roadmap

Examples



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Time

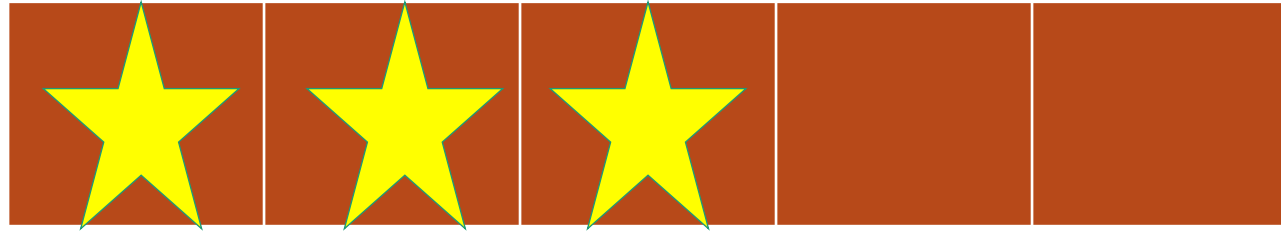


Visual Countdown Timer 4+

Fun visual countdown timer
Fehners Software LLP

★★★★★ 4.6, 9K Ratings

Free · Offers In-App Purchases



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Over and under stimulation

- Planned sensory breaks
- Planned sensory diet for input
- Minimize visual and auditory stimulation
- <https://www.youtube.com/watch?v=plPNhooUUuc>



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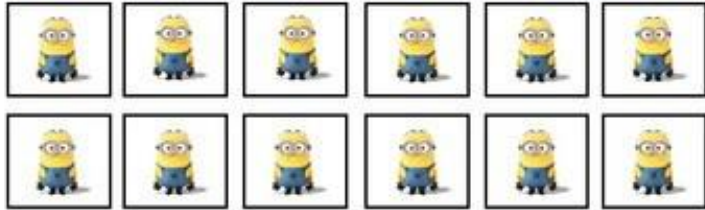
Errorless learning

Visual Roadmap

I am working for



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I am working for.....

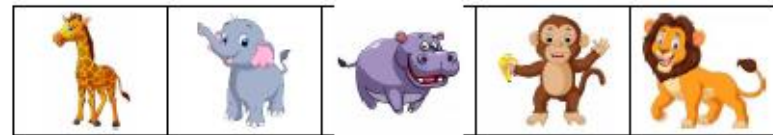
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I am working for...

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Example

- Behavior: Refusal to transition. Flopped on the floor.
- Strategy: ????



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High probability request sequence

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Use strengths and interests to engage and to reward

Give time to process

Errorless learning

Visual Roadmap

Reinforcement/Reward Inventories

Sometimes this can involve another object or sometimes it might be something that they do repetitively with their body and do not seem to have a clear purpose. We call these sensory seeking behaviors.

Auditory (Sound)

Behaviors you may observe: humming, verbalizations, tapping on objects, listening to music, putting ear to objects.						
Behaviors observed that may be auditory seeking:			<i>Who has access?</i> <i>(list any additional environments your child may go)</i>			
Liked	Disliked	Things to try:	Home	School		
		Toys that make noise				
		Drums				
		Triangles				
		Tambourine				
		Bells				
		Keyboard				
		Whistles				
		Radio				
		Push / Pull toys that make noise (See and Say)				
		Music boxes / Jack in the Box				
		Hair Dryers				
		Books on Tape				
		Music				

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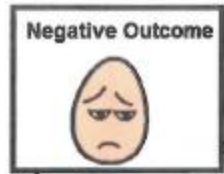
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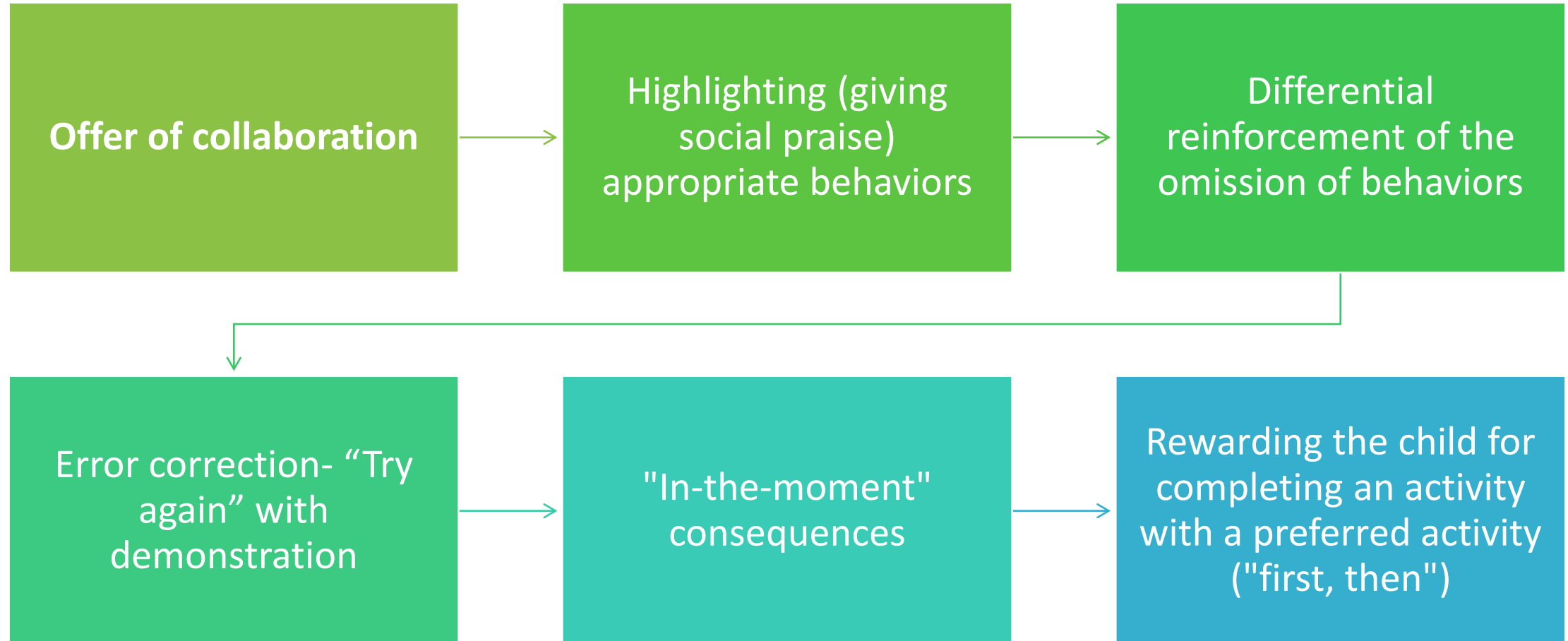
Errorless learning

Visual Roadmap



Consequence Strategies

Ensures the behavior will or will not happen again





And yet,
we still have
challenges....

Behaviors

TRANSITIONS/REFUSAL TO GO

IMPULSIVENESS

PROPERTY DESTRUCTION

AGGRESSION (SELF AND OTHERS)

FREEZE RESPONSE

MELTDOWNS

PERSEVERATIVE SPEECH/YELLING

CONSTANT STIMMING

TEETH GRINDING

FECAL SMEARING

SELF-EXPOSURE/MASTURBATING

COMPULSIVE BEHAVIORS

Common Functions of Behavior



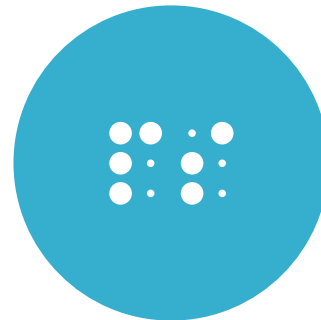
Social Attention: A person may engage in a certain behavior to gain some form of social attention or a reaction from other people. For example, a child might engage in a behavior to get other people to look at them, laugh at them, play with them, hug them or scold them.



Tangibles or Activities: Some behaviours occur so the person can obtain a tangible item or gain access to a desired activity. For example, someone might scream and shout until their parents buy them a new toy (tangible item) or bring them to the zoo (activity).



Escape or Avoidance: Not all behaviours occur so the person can “obtain” something; many behaviours occur because the person wants to get away from something or avoid something altogether (Miltenberger, 2008).

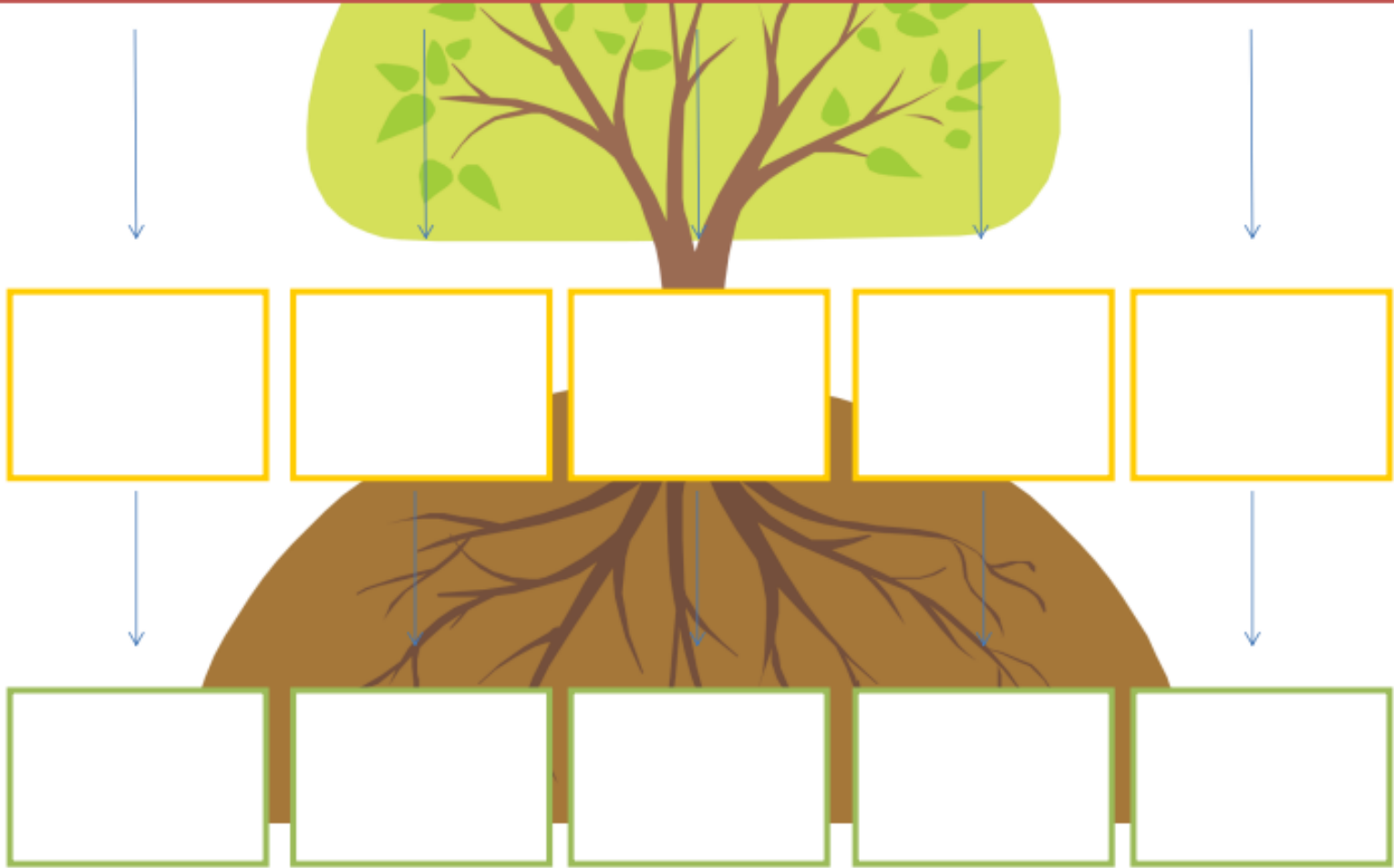


Sensory Stimulation: The function of some behaviours do not rely on anything external to the person and instead are internally pleasing in some way.

Data Tracking

Time/ Date/ Activity Initials of person documenting	Antecedent/ Trigger/ What happened right before?	Behavior/ Details of behavior	Consequence/ What happened after?	Function of the behavior?

Observed Behavior



Observed Behavior
Hitting self in the head



Attention Wants something but can't communicate Like sensation Pain Communication

[Empty boxes for additional causes]



Nick age 29, diagnosis of DS-
ASD and Verbal Apraxia
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Behaviors that Impact DS-ASD Individuals and their Families:

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Elopement

Sensory aversion (Haircuts, nail trimming, medical procedures, etc)

Sleep

Self-Stimulation (stimming)

OCD/ Need for sameness

Boundaries personal and others

Impulse Control

Property Destruction

Aggression/Meltdowns

Transitions

Outburst that seem out of the blue

Nudity

Toileting incontinence/Fecal smearing (code brown)

Nick's Escape Behaviors:

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- Haircuts, nail trimming
- Blood draws, vaccinations & flu shots
- Running into the street
- Transitions
- Crying babies
- Group family photos
- Air fryer

Nick's Attention Seeking Behaviors:

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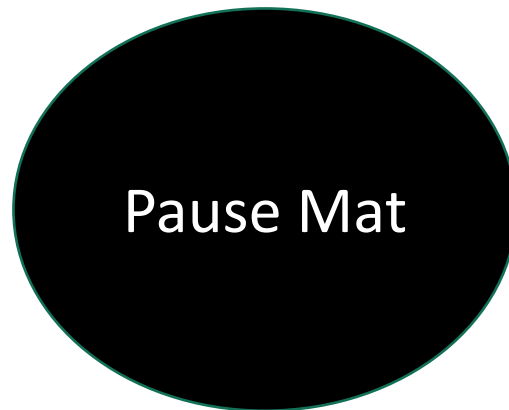
- Running faucets, pushing microwave fan button, pushing car remote alarms
- Pulling fire alarms
- Knocking and swiping things off tables
- Breaking picture frames
- Burping & passing gas
- Tapping objects
- Vocal stimming



Tangible or Activities

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- Ending a preferred activity
- Taking away a tangible
- Getting upset when you can't get a tangible or do a preferred activity



Nick's Sensory Stimulation

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-
- Vocal stims/ yelling
 - Tapping
 - Rocking
 - Spitting
 - Wiping bodily fluids/feces
 - Throwing, swiping, breaking objects



What is the
function of
behaviors?

"I see you're dealing with a lot of stress.
Have you tried knocking a bunch of stuff
off the table?"



Behavior Support for DS-ASD:

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- Determine function of behaviors.
- Identify triggers and setting events.
- Collaborate on supports needed and how to help the child to avoid/manage triggers.
- Identify replacement behaviors to fulfill the need.
- Use behavior support plan across all environments.



Putting it all Together:

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The Lid

Antecedents:

- *Time of day/AM
- *Hurry for bus
- *Transition
- *Taking highly preferred stim away

Behaviors:

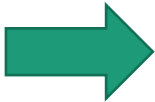

- *Yelling
- *SIB's
- *Non-compliance in transition to bus
- *Hitting bus window

Supports:

- *Visual Schedule
- *Time Timer countdown
- *Stop Icon Bin
- *Allow for processing
- *Praise

How we Supported Nick

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- Address Speech with an AAC Evaluation
- Implemented a steady sensory diet
- Visual schedules, social stories, process time
- First-Then  Pop  Sprite
- Offer choices= Feeling in control
- Re-direct behaviors
- Use replacement behaviors & saturate the day with meaningful activities/jobs
- Respond and don't react

About Me Resume

www.teresaunnerstall.com



NICK UNNERSTALL

28 YEARS OLD. DIAGNOSIS: CO-OCCURRING DOWN SYNDROME AND AUTISM (DS-ASD)

VISION STATEMENT

We wish for Nick to be valued and respected and meaningfully included throughout his life. We hope that you meet Nick at his level and presume competence as you embrace his strengths and the gifts that he has to offer the world. We envision Nick having a happy, meaningful and productive life surrounded by those who will care, support and love him.

STRENGTHS

- *Receptive Language
- *Visual Learner
- *Good at matching and putting things away
- *Takes pride in his work
- *Heavy work and Structured TEACCH activities
- *Funny and Social
- *Likes to please

CONTACT DETAILS

Teresa Cell
Al Cell
Email: tjunnerstall@comcast.net
Blog: www.nickspecialneeds.com
Facebook/Instagram:
[@downsyndromewithasliceofautism](https://www.instagram.com/downsyndromewithasliceofautism)

WHAT WORKS FOR ME

- *Routine
- *Visual Schedule and Communication System
- *Allow for processing time in activities and transitions
- *Social Stories
- *First-Then Cues and Work Charts
- *Breaking down steps to learn new tasks
- *Giving me choices
- *Praise accomplishments and good behavior
- *Respecting my need to stim
- *Reminders what am I working for
- *3-2-1 Countdown
- *Stop sign icon and visual timers to indicate all done

What I Struggle With




- *Being told no, instead say all done, stop, later or use 3-2-1 countdown
- *When someone corrects my work or effort, instead say oopsie or oh no-try again.
- *Taking things away from me, instead hand me a box with a stop icon
- *Being rushed, instead allow time for me to process
- *Being overstimulated, watch for signs of stress like biting my ID bracelet and pinching my cheek.
- *Healthcare checkups, blood draws, immunizations
- *Impulse control especially pulling fire alarms, dumping and spilling drinks, throwing and other forms of property destruction

Favorite Things

- *Family and Personal Support Workers
- *Music and Movies
- *Community activities like restaurants, movies, parks, etc.
- *Watching YouTube videos
- *Hot tub and deck time
- *Taco Bell, Culvers, Olive Garden
- *Being Silly and joking
- *Dancing
- *Tapping objects to help me regulate
- *Movies on Demand: The Nutty Professor, Dr. Doolittle, Norbit, Mrs. Doubtfire, Snow Dogs, Flipper, Stuart Little, Cats and Dogs, The Other Guys, A Dolphin Tale, Rug Rats Thomas the Tank Engine Classic Series

Shifting the Language to a Place of Empathy:

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- Attention seeking  Connection seeking
- Challenging behaviors:
 -  Dysregulation
 -  Skill gaps in the ability to communicate, regulate senses/emotions, and control impulses.

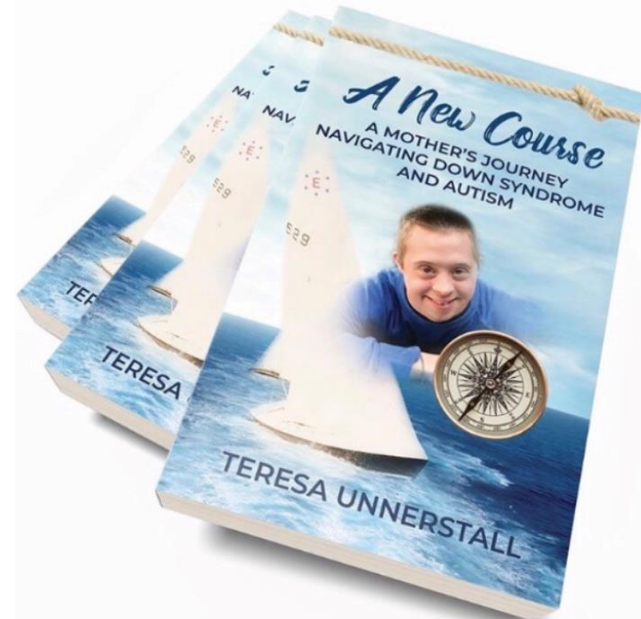
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NAVIGATING DS - ASD



The important point is that difficult behaviors do not occur by accident, or because someone has a disability. Difficult behaviors are expressions of real and legitimate needs. All behavior, even if it is self-destructive, is “meaning-full”.

David Pitonyak, PhD
Blacksburg, VA
Down Syndrome News
