AUTISM & TRAUMA: THE COMPATIBILITY OF ABA AND TRAUMA-INFORMED PRACTICES

SAMANTHA ZALDIVAR MCFARLAND, M.ED, BCBA, LBA
CLINICAL DIRECTOR, BRAAC
CHRISTY BONAVITA, FOSTER CARE SPECIALIST
DEPAUL COMMUNITY RESOURCES



SAMANTHA MCFARLAND

- Clinical Director, SVH Services, Blue Ridge Autism and Achievement Center
 - Licensed Behavior Analyst
 - Oversee intensive one on one programs for ages 2-22 clients with ASD and other learning challenges
 - Consult with younger and older!
 - · Provide school personnel and family training
 - Special interest in challenging behavior reduction, language training, and life skill acquisition
 - Licensed school counselor
 - Worked for 3 years in Roanoke City Public Schools
 - Currently lead social skills groups with special interest in adolescents



CHRISTY BONAVITA

DePaul Community Resources

- Child & Family Services
 - Foster Care, Adoption, Community-Based Services
- Developmental Disabilities Program
 - Sponsored Residential, Group Homes, Day Sur
- Regional Trainer, Child & Family
 - Foster / Adoptive Parents & Workers
 - Attachment & Trauma focused
- Human services field since 2000
 - Foster Care / Adoption casework
 - Home Studies
 - Group home care





OBJECTIVES

- Participants will
 - be able to articulate the importance of knowing client history of trauma as it relates to interventions
 - understand that clients with disabilities are at risk of also experiencing trauma and this may effect interventions
 - compare how ABA and Trauma-informed approaches are compatible, individualized approaches
 - Identify strategies as possible interventions to try with clients





REASON FOR THE PARTNERSHIP

- Promote greater understanding of Autism Spectrum Disorder
- ABA is a proven and effective intervention for autism
- There was a missing piece







TRAUMA AND DISABILITIES

- More likely to experience trauma
- More likely to experience abuse
 - 1.8 times more likely to experience neglect
 - 1.6 times more likely to experience physical abuse
 - 2.2 times more likely to experience sexual abuse
 - (Minnesota study) 3 4 times more likely for maltreatment compared to other CPS involved children
- More likely to experience negative life events (illness, injury, etc.)



PURPOSE OF AWARENESS



• PTSD symptoms overlap with behavioral symptoms of autism

Symptoms of ASD	Symptoms of PTSD
Repetitive behaviors w/objects or speech	Repetitive play with recurrent themes
Hyper-reactivity to sensory input	Marked psychological reaction to external cues
Deficits in social reciprocity	Feelings of detachment from others

Sleep problems, withdrawal, avoidance, irritability, mood lability, perseverations

 Practitioners need to be aware that trauma can contribute to behavioral symptoms associated with ASD.

(Brenner, Pan, Mazefsky, Smith, & Gabriels, 2018)





COMPOUNDING DIFFICULTIES IN STRATEGY APPLICATION WITH PEOPLE WITH AUTISM

- May have decreased expressive communication
 - Why would this be an added challenge?
- May have difficulties understanding receptive language
 - Processing language
 - Why would this be a challenge?
- Heightened emotional reactions





APPLIED BEHAVIOR ANALYSIS (ABA) & TRAUMAINFORMED APPROACH



Working Together





HOW WE APPROACH CHILDREN







ABA-BASED APPROACH

- Therapy always starts and continues with pairing the practitioner with reinforcement.
 - Relationship building is the key!
 - MYTH: ABA relies on edible and tangible reinforcement
 - FACT: The person delivering the therapy should be strongly paired with praise and reinforcement that the therapist, Behavior Analyst etc. signals "all things good."





ABA APPROACH

- Behavior Analysts and Behavior technicians begin interactions with the client's motivation gauging behavioral reactions.
 - MYTH: ABA is forcing compliance and all instructor directed tasks
 - FACT: Quality ABA programs rely on motivation for interaction with the therapist, BCBA and the situations.
 - Compliance may be necessary, but it is run with heavy reinforcement for replacement behaviors, increasing obtainable steps



The way positive reinforcement is carried out is more important than the amount.

(B. F. Skinner)

izquotes.com





ATTACHMENT / TRAUMA-INFORMED APPROACH

FOCUS IS ON:

- Regulation
- Safety
- Healthy Relationship
 - Positive Interactions (positive affect)
 - Need fulfillment
 - Warm facial expressions
 - Eye Contact
 - Touch

A relationship trauma can only be healed relationally.
-Karyn Purvis





SOURCE OF CHALLENGING BEHAVIORS

AUTISM

- Communication Deficits
- Brain structure is different causing age inappropriate and exaggerated reactions
- Strong reactions to sensitivities of environmental stimuli

TRAUMA

- Stress Response
 - Fight/Flight/Freeze
- Hyperarousal

(Overactive stress response)

- Triggered in seemingly safe situations
- The brain's shortcut
- Survival behaviors



CHALLENGING BEHAVIOR



BEHAVIOR ANALYST APPROACH

- Why is the challenging behavior occurring?
- What's the Need?
 - Access, Attention,Escape, Avoidance,Automatically –Reinforcing
 - Behavior is communication!

TRAUMA- INFORMED APPROACH

- Why is the challenging behavior occurring?
- What's the Need?
 - Basic needs
 - Safety and...

Felt Safety





TRADITIONAL FUNCTIONS OF BEHAVIOR

- Attention Look at me! Get over here now!
- Access Give it to me!
- <u>Escape</u> Heck no I'm not gonna' do it! Get me out of here!
- <u>Avoidance</u> This place looks like a place I don't want to be so I will just get out now!
- Self- Stimulatory This feels good





ABC'S OF BEHAVIOR

- A = Antecedent, what was happening before the behavior occurred (anything in the environment)
- B = Behavior, what did the behavior look like?
- C = Consequence, what happened immediately following the occurrence of the behavior
 - Example:
 - A = Suzie takes toy from Johnny
 - B = Johnny screams and starts banging his head on the ground
 - C = caregiver quickly takes the toy from Suzie and gives it back to Johnny





DIFFERENT WAYS TO SAY THE SAME THING

- Behavior has a function
- Behavior meets a need







WHEN A CHILD IS IN CRISIS





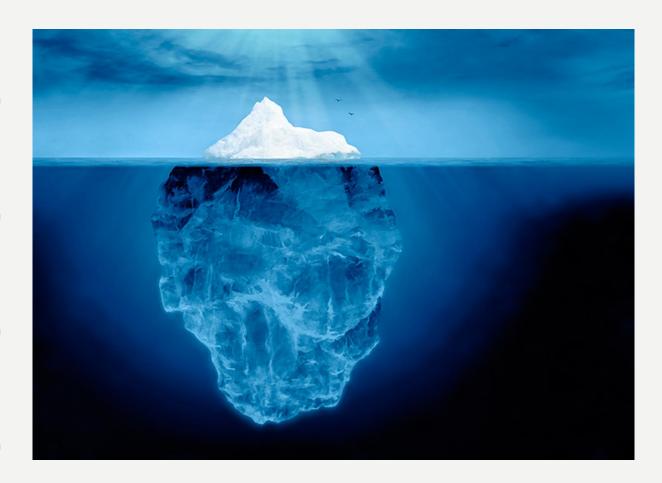


- A traditional mindset with a blanket approach to discipline is not supported by Behavior Analysts or by those working with children with trauma
- Why?













Traditional Discipline Does NOT Work For Traumatized Children

- Motivation for behavior is different
- Children believe if they lose control,
 their world will end
- Behavior addresses a NEED and survival TRUMPS everything else
- If the need is not met, behavior will continue and may escalate...





SURVIVAL BEHAVIORS

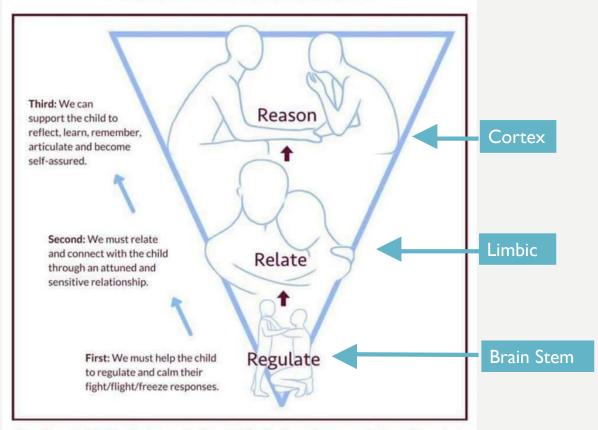
- Child's attempt to protect self in response to perceived danger
- Occur when stress response is active
- Child does not trust others to meet their needs
- Behaviors are frustrating, confusing, seemingly illogical
- Feels personal (but it's not!)
- Child who is afraid may look angry & child who is sad may lash out -Dr. David Cross (Talley, 2014)



The Three R's: Reaching The Learning Brain

DEPAUL COMMINITY RESOURCES

Dr Bruce Perry, a pioneering neuroscientist in the field of trauma, has shown us that to help a vulnerable child to learn, think and reflect, we need to intervene in a simple sequence.



Heading straight for the 'reasoning' part of the brain with an expectation of learning, will not work so well if the child is dysregulated and disconnected from others.





MOVING TO UPPER BRAIN

- Regulate
 - Help child feel safe
 - Get on child's level
 - Reassuring, nurturing talk
 - Grounding & Calming—From "there & then" to "here & now"
- Relate
 - Connect
 - Validate feelings
 - Short sentences
 - Soothing voice
 - "You are safe", "I will help", "This is hard", etc.

(Lang, 2015)





ABA BEHAVIORAL INTERVENTIONS

- Similar to Trauma Informed
- Know your client's history so as to avoid re-traumatizing with your approach
 - What does this mean?
- Be calm and "neutral" but present with client
- If ignoring the behavior DO NOT ignore the client
 - What does this mean?
- Be ready to resume reinforcement





THINGS TO BE AWARE OF:

- Try not to switch out staff
 - Example: A student/client escalates and "the behavior squad" steps in
 - Why would this be an issue to be aware of with clients who have a past trauma?
- Physical management may be necessary for safety but only as a last resort and especially careful not to look like past trauma situations
 - Males holding females?
 - Floor holds?
- Be aware of history when using any type of safety room. Seclusion is not allowed in schools but any type of room or area where a child perceives being alone, make sure you are asking....does the benefit outweigh the risk (including potential psychological risks)?





Questions to Ask Before Implementing an Intervention





TRAUMA & ABA PERSPECTIVE

- Does it make the child feel safe?
 - -ls it safe?
- Does it work?
 - -Is it evidence based and effective?
- Does it maintain connection or encourage isolation?





TOOLBOX—PREVENTION





INCREASING HAPPINESS



ENGAGEMENT and ATTACHMENT

- Warm facial expression (warm eyes & smile)
- Positive interactions ("banking time")
- Need fulfillment (interpret cues, provide comfort, respond to distress)
- Provide choices

(Clevenger & LaForce, 2018; Bergin & Bergin, 2009)

PLAY

- Disarms fear -Dr. Karyn Purvis
- Use playful voice as much as possible (Talley, 2011)

APPROPRIATE EXPECTATIONS

- Developmentally & Emotionally
- Set the bar for success

(Clevenger & LaForce, 2018)



BRAAC CREATING A SUPPORTIVE ENVIRONMENT

ABA – ANTECEDENT (BEFORE/ALWAYS) **STRATEGIES**

- Clear Rules & Expectations Why?
- Supportive, Structured Environment
 - Visuals to order routines and signify changes
 - Access to preferred people, locations, and meaningful educational and leisure items
 - Continued pairing (relationship building) with people and places in the environment
 - Providing sensory equipment if needed and effective for individual (headphones, chewies, etc.)

TRAUMA - INFORMED **ENVIRONMENT**

- Meet needs
 - Physical and Emotional (Maslow's hierarchy)
 - Food, Water, & Movement every 2 hours*
- Sensory Input (according to sensory assessments)
 - Visual
 - Auditory
 - Olfactory
 - Gustatory
 - Tactile

And don't forget...

- Vestibular
- Proprioceptive

(Talley, 2010)





REPLACEMENT SKILLS



- Teach about Self-Regulation
 - Engine plates
 - Deep breathing
 - Calming activities
- Label feelings
 - Provide language
 - "Name It to Tame It"(Siegel & Bryson, 2011)
- Scripts
 - Gentle and kind
 - No hurts
 - Ask for permission
 - With respect







HOW CAN YOU TEACH SCRIPTS? FLIP THAT SCRIPT!

- Practice!
- Social Stories
- Comic book stories
- Video Models

***Take data to make sure it is effective for the individual!

FUNCTIONAL COMMUNICATION TRAINING

- All behavior is communication, even challenging behavior
- Figure out the need, and you may be able to teach a more functional way to communicate that need:
 - Attention greetings, conversation, "Look what I did."
 - Access the item, "When can I have back?"
 - (May reduce some hoarding or panic when items are removed.)
 - Escape: "help" (Makes tasks easier), "break," "take a walk,"



SPECIFIC STRATEGIES



- Access:
 - Functional Communication
 - Asking for items ("cars" "balls")
 - Asking when items will be available or returned ("When can I come back?")
 - If removing items:
 - Visuals may help convey that items are not "gone"
 - Timers signify how long to wait
 - Available/Not Available boards Make availability more concrete









HOW TO TEACH SELF REGULATION

- Transfer from the Behavior tech, Behavior Analyst, or teacher monitoring to self instruction and monitoring systems
 - Video Feedback
 - Self-instruction
 - Client taking data on themselves
 - Learning to praise themselves and reinforce for using positive strategies!
 - Learning to catch themselves/be aware of old problem behaviors and use new strategies.





POSITIVE IDENTITY

- Focus on strengths
- Nurture child's sense of identity vs. defining child by their behavior
- Understand the lens for self
 - Labels











TOOLBOX—CALMING ACTIVITIES







ABA: PROMPT NEUTRAL/HIGH PROBABILITY BEHAVIORS

- Not reinforcing activities (talking about subjects they perseverate, playing video games, favorite songs, etc.)
- Easy behavior person can do quickly
- Allows you to provide small reinforcement (praise for compliance)
- Remember to speak slowly and calmly
- Incorporate task related activities OR
 - Use the grounding activity suggestions on the next slide....
 - Use taught calming strategies





GROUNDING ACTIVITIES

- Simple task to focus on
- Moves the brain from "there and then" to "here and now"
 - Tactile item to hold (ask questions about it)
 - Sorting (cards by number, color)
 - Follow object with your eyes
 - How many shades of blue do you see?
 - 5-4-3-2-1 Exercise







ABA APPROACH TO SENSORY OR PHYSICAL "CALM DOWN":

- Take data to determine effectiveness of various sensory interventions
- Give the child the input they seek before escalating and contrive opportunities to practice communicating the need (squeezes, bounce)
 - Prompt the requests and teach them to be in charge of the request so they learn to self-regulate.
 - Remember this is a "baby step" process. Starting with free access, easy communication, and a lot of reinforcement!

Where I can go when I need a break:

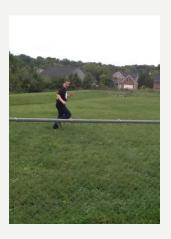


Walk on sidewalk in front of building



Do wall pushups in the hall





Walk/Run in field behind playground



Run laps in the gym



Sit in the gazebo





CALMING-RHYTHM AND REPETITION

- Music (slow, steady tempo)
 - Singing
 - Dancing
 - Drumming*

- Rhythmic movement
 - Walking
 - Drumming
 - Rocking











CALMING ACTIVITIES— SENSORY INPUT

- Gum*
- Peppermint scent
- Firm pressure
 - -Pressure points (make a mustache)
 - -Neck weight, weighted blanket or lap pad
- Chair sit-up / Push against wall
- Nature (walking barefoot on grass, smelling flowers, etc.)







CALMING-RHYTHM AND REPETITION

- Repetitive movement of hands
 - Dribbling basketball
 - Running hands through sand
 - Rolling ball back and forth
 - Clapping



THANK YOU

Samantha McFarland

Samantha.McFarland@svhservices.org

Christy Bonavita

CBonavita@depaulcr.org

REFERENCES

- Athens, E. S. & Vollmer, T. R. (2010). An investigation of differential reinforcement of alternative behavior without extinction. *Journal of Applied Behavior Analysis*, 43(4), 569 589.
- Bergin C. & Bergin D. (2009). Attachment in the Classroom. *Educational Psychology Review*. 21, pp. 141-170. DOI 10.1007/s10648-009-9104-0.
- Carr, E. G. & Durand, M,V. (1985). Reducing problems through functional communication training. *Journal of Applied Behavior Analysis* (18), 111 126.
- Clevenger, D. & LaForce, A. (2018) Children, Trauma & the Increased Risk for Children with IDD [PowerPoint slides]. Retrieved from https://www.ffta.org/resource/resmgr/files/webinars/Trauma_IDD_Pinnacle_START_.pptx
- Davis, J. L., Mason, B.A., Davis, H. S., Mason, R.A., & Crutchfield, S.A.. (2016). Self-Monitoring interventions for students with ASD: a meta- analysis of school-based research. *Journal of Autism and Developments Disorders*, *3*, 196-208.
- Grounding Exercises for Children. (2016, October 26). Retrieved from http://www.unseenfootprints.com/grounding-exercises-children/
- Lang, J. (2015, April 21). The 3 R's: Regulate, Relate & Reason-Improving Emotional Regulation. Retrieved from https://jessicalangtherapy.com/blog/regulate-relate-reason-brain-state/
- O'Leary, S. G., & Dubey, D. (1979). Applications of self control procedures by children: a review. *Journal of Applied Behavior Analysis*, *12*, 449 465.

REFERENCES

- Scholey, A., Haskell, C., Robertson, B., Kennedy, D., Milne, A., Wetherell, M. (2009). Chewing gum alleviates negative mood and reduces cortisol during acute laboratory psychological stress. *Physiological Behavior*, 97(3-4):304-12. doi: 10.1016/j.physbeh
- Siegel, D. J. & Bryson, T. P. (2011, October 4). *The Whole Brain Child.* New York, NY: Delacorte Press.
- Siegel, D.J & Hartzell, M. (2014). *Parenting From the Inside Out*. New York, NY: Tarcher Perigree.
- Talley, O. (Producer). (2010). A Sensory World: Making Sense of Sensory Disorders [DVD]. Ft. Worth, TX:TCU Institute of Child Development
- Talley, O. (Producer). (2014). Children from Hard Places [DVD]. Ft. Worth, TX: TCU Institute of Child Development
- Talley, O. (Producer). (2011). Trust-Based Parenting [DVD]. Ft. Worth, TX:TCU Institute of Child Development
- The Annie E. Casey Foundation. (2017). *ARC Reflections*. Baltimore, MD. Retrieved from https://www.aecf.org/m/resourcedoc/aecf-facilitatororientationandhandouts-2017.pdf
- The Three R's: Reaching The Learning Brain. (n.d.). Retrieved from https://beaconhouse.org.uk/wp-content/uploads/The-Three-Rs.pdf