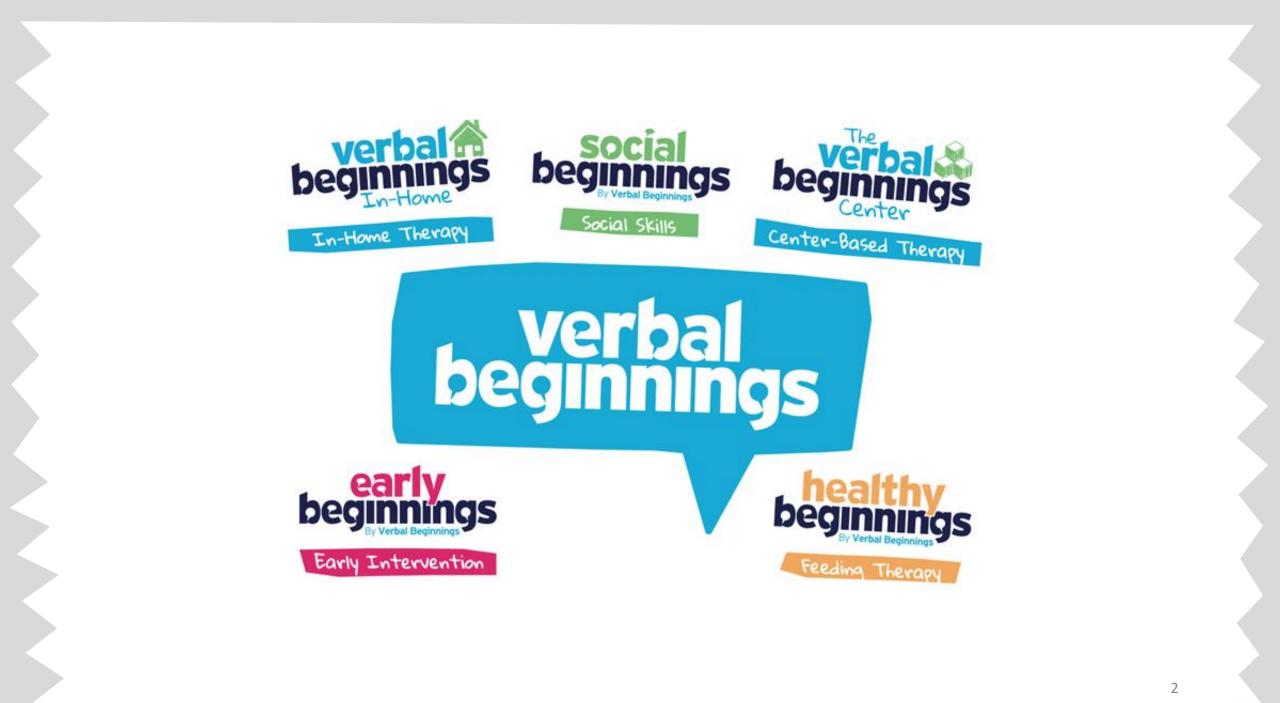
verbal beginnings

Trauma-Informed ABA:

ABA through a Compassionate Care Lens

Presented by Alyse Handelsman, BCBA, LBA Graciela Gomez, BCBA, LBA





Alyse Handelsman, MEd, BCBA, LBA

- Alyse started her career as a Social Worker in an inpatient hospital in 2012 where she was first exposed to Applied Behavior Analysis (ABA).
- Alyse obtained a second masters in Applied Behavior Analysis and received her supervised experience hours as an RBT at Verbal Beginnings.
- In 2018, Alyse became a BCBA and gained experience providing early intervention services in the field and consulting with residential settings.
- In 2020, Alyse returned to Verbal Beginnings as a Clinical Supervisor and became a Program Coordinator at their Millersville location in 2021.
- Alyse is passionate about incorporating her experience with Trauma Informed Care as a Social Worker into her evidence-based work as a Behavior Analyst.
- Alyse is a proud mother of a three year old named Kivi and enjoys spending the weekends with her family and dogs.





Grace Gomez MA, BCBA, LBA



- 2005 Bachelors degree in Psychology and a minor in Applied
 Developmental Psychology from the University of California, Los Angeles
- 2005 Started out in the field of Applied Behavior Analysis (ABA)
- 2008 Masters in Education from California State University, Long Beach and interned as a bilingual school psychologist.
- 2010 Completed BCBA coursework at Florida Institute of Technology
- 2010 Became a BCBA!
- Clients: range between 18 months to 17 years of age
- Settings: in-home, community, shool, and clinic.







We do NOT consider ourselves experts..... But let's talk about some things going on in our field, shall we?



Objectives

Participants will...

- define Trauma Informed Care as it pertains to ABA therapy and Autism services
- compare conflicting perspectives of ABA therapy
- be able to speak to the process of conducting a risk-benefit analysis when considering interventions



The Current Debate

The discussion of Trauma- Informed Care (TIC) is becoming more prevalent within the field of applied behavior analysis (ABA). Historically, behavior analysis has heavily relied on more intrusive procedures. As our ethics continue to guide us away from said strategies, we are left with the debate between effectiveness versus Trauma Informed Care.



Trauma Informed Care is anticipating and treating every client as if they have encountered trauma, and utilizing practices that avoid future or re-traumatization.

Trauma: the result of violence, abuse, neglect, discrimination, loss and other emotionally harmful experiences (SAMHSA, 2014).





Trauma has no boundaries...It is an almost universal experience of people with mental and substance use disorders. The need to address trauma is increasingly viewed as an important component of effective behavioral health service delivery.

(SAMHSA, 2014)





The Lifelong Effects of Early Childhood Adversity and Toxic Stress Jack P. Shonkoff, Andrew S. Garner, THE COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH, COMMITTEE ON EARLY CHILDHOOD, ADOPTION, AND DEPENDENT CARE, AND SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS, Benjamin S. Siegel, Mary L Dobbins, Marian F. Earls, Andrew S. Garner, Laura McGuinn, John Pascoe and David L. Wood

Pediatrics 2012;129;e232; originally published online December 26, 2011; DOI: 10.1542/peds.2011-2663

The online version of this article, along with updated information and services, is located on the World Wide Web at: http://pediatrics.anppablications.org/content/129/1/e232.full.html

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948, PEDIATRICS is owned, published, and trademed by the American Academy of Pediatrics, 141 Nerthwest Peint Boulevard, Elk Grove Village, Illinois, 60007. Copyright C 2012 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1031-4005. Online ISSN: 1098-4275.

American Academy of Pediatrics DEDICATED TO THE REALTH OF ALL CHILDREN'

Downloaded from pediatrics appublications org at Oukland University on May 27, 2014

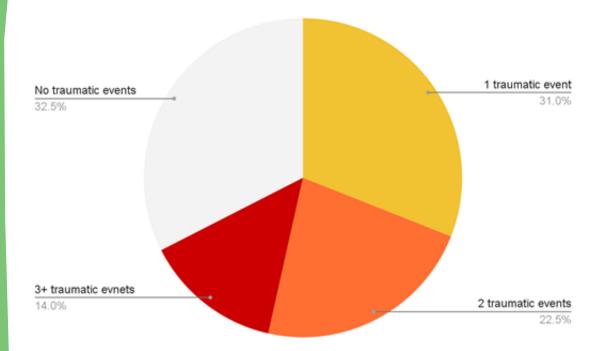
Studies have shown childhood trauma/adversities often lead individuals to develop life threatening adult diseases and psychiatric disorders.

(Shonkoff et al., 2012, McLaughlin et al., 2009, Lopez et al., 2017, and more!)



The prevalence of Trauma. By age 16:

- 30.9% 1 traumatic event
- 22.5% 2 traumatic events
- 14% \geq 3 or more traumatic events



Stack & Lucyshyn (2018)

- Trauma and ASD
- Impact to the brain
- The role of the caregiver and the Central Nervous System
- Children with ASD are at increased risk for exposure
- PTSD and ASD have similar symptoms
- There is very little research on trauma in relation to autism
- Trauma Treatment Model for Individuals with ASD



Response to Criticisms of ABA

- Hypothesis testing bias
- Indirect measures
- Respondent Selection
- Unclear ABA-based interventions
 - O ABA done badly, is in fact, not ABA
- Measurement system



Response to ABA criticisms

Response to the following criticism:

- ABA promotes prompt dependency
- ABA only works for children with particular characteristics of ASD
- ABA includes methodologies that are considered "out of date" and ineffective
- ABA has no data showing its effectiveness over the long term
 - This is an inaccurate claim:
 - Dawson et. al, (2010)



ABA and Toilet Training

- Prompted to bathroom for accidents
- Praise and tangible provided for urination
- If an accident occurred a response was delivered in an attempt to startle the participant

Findings from Cicero and Pfadt less intensive approach:

- Accidents dropped to near zero levels
- Spontaneous requests increased
- Slightly lower rates compared to Foxx & Azrin (1971)
 - All participants mastered within 10 days





Cicero & Pfadt (2002)

Some Considerations: Toileting

- Past attempts to toilet train
- Age of client
- Limited preferences
- Often necessary to participate in a less restrictive setting (camps, schools, etc.)
- Is not being toilet trained limiting access to intervention
- <u>Dignity and privacy</u>



Feeding Interventions (Meal time Compliance)

About one in three children with a disability may experience significant feeding concerns *(Sharp et al. (2010)*

Rigidity with:

- o Variety of food
- o Food presentation
- o Texture of food
- o Feeding themselves
- o Using utensils





Findings & Limitations

- Compilation of studies demonstrated that 83.3% of interventions included Escape Extinction 83.3%.
- Limitations to consider
 - There are some behavioral side effects to using this method
 - Difficult to implement correctly
 - How acceptable is this method to the public



Alternatives to Consider

Alternative ABA treatment options:

- Preventative and reinforcement based methods:
 - High-probability instructional sequence combined with low-p demand fading in
 - Study by Penrod, Gardella and Fernand used this treatment and it helped the patients increase the amount of food they consumed.
 - Evaluate food type and texture
 - Increased food acceptance
- Using trauma informed care approach:
 - Increased amount of food consumed.



Punishment

- Comes in many forms
 - Meant to decrease the frequency, duration and/or intensity in which a behavior occurs
- Side effects of punishment
 - Aggression
 - Counter control
 - Individual may model the punishing behavior
 - May actually increase the behavior because it is reinforcing
- Ethics:
 - 2.15 minimizing risks and utilizing the least restrictive means possible



Intervening on Stereotypy

- Repetitive, rhythmic, often bilateral movements with a fixed pattern
- Diagnostic feature of autism (Cunningham & Schreibman, 2007)
- People may report feeling happy and satisfied when engaging in stereotypy
- Stereotypy may be self-injurious, socially offensive, or disruptive to desired activities (Marraganorre et al., 1991; Symons et al., 2005)





Function-Based Treatment for Stereotypy (Potter, et al., 2013)

- Stereotypy as reinforcement
- Replication of Hanley et al. study
 - o "Reinforcer used is that what is found to maintain the problem behavior"
 - o Only function based treatment for stereotypy in which the maintaining reinforcer is also provided
 - o Procedure:
 - Activities only condition
 - Activities plus prompting
 - Activities plus prompting, plus blocking
 - Activities plus prompting, plus blocking, plus DR
 - o Findings



Other considerations

- Who is the client?
- Is the stereotypy dangerous or does it impact learning?
- How often is it happening?
- Socially significant?
- Will interventions generalize to less restrictive environments?
- What benefit does it bring to the client?
- Are they a stakeholder in their intervention?



Less Intrusive Intervention on eye contact

- O'handley, et. al (2015)
- Social Stories and Video Modeling
- 6 adolescent males diagnosed with ASD and/or ID
- Multiple baseline design

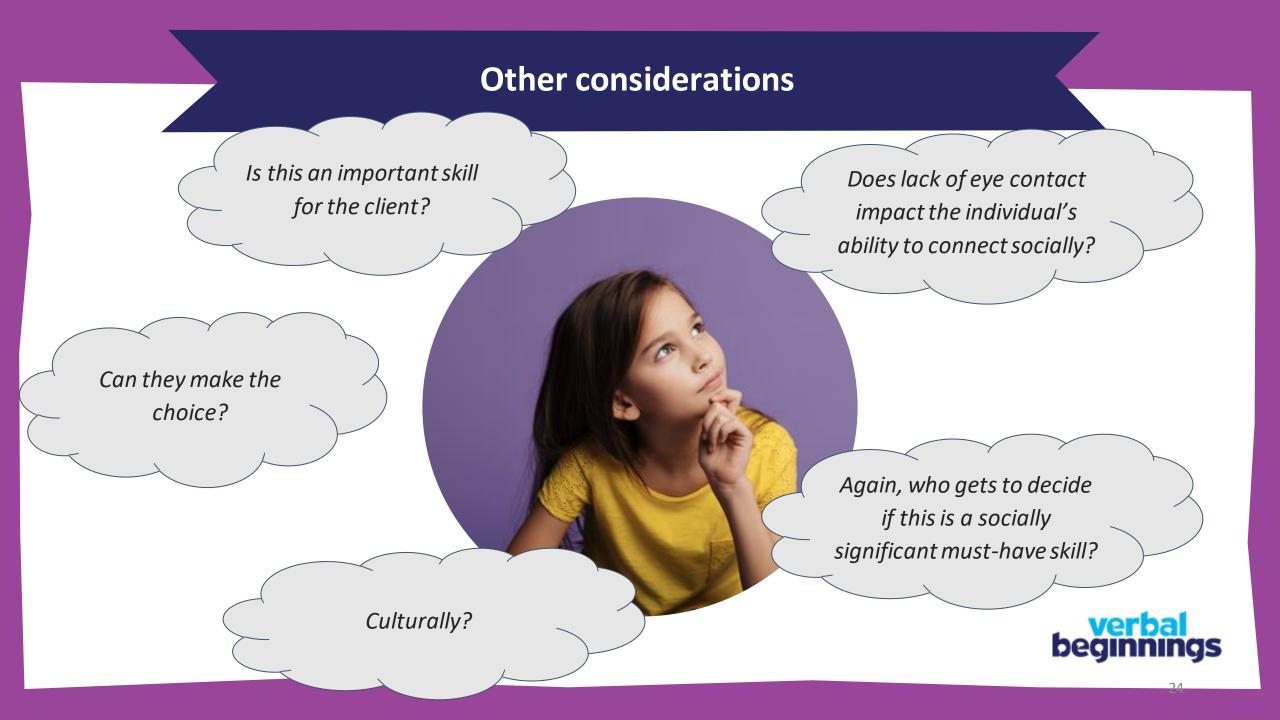
Findings:

- Social Stories in isolation
 - o Moderate Improvement
 - o Addition of video modeling=improved/maintained levels
- Video modeling in isolation
 - o Large and immediate increase
- Combined interventions
 - o Addition of social stories had no impact

Limitations:

• Did not investigate whether improved eye contact is associated with improvements in other areas





The problem with "new ABA"

Changing behavior as the primary goal

Intensive hours

Compliance-based therapy

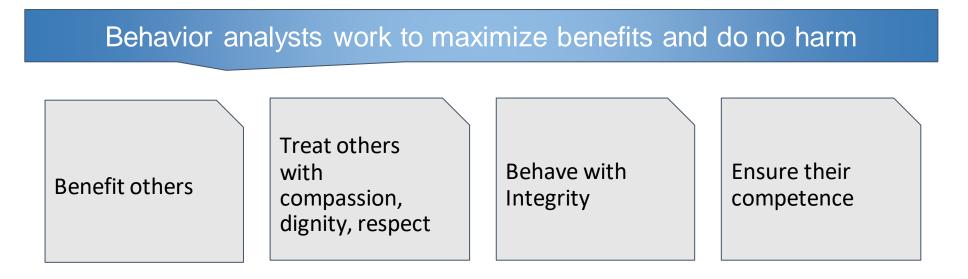
Promoting the idea that children must change to fit in

Focus on rewards over motivation



Ethics Code of Behavior Analysts

The *Behavior Analytic Code of Ethics*, effective January 1, 2022 cites **four foundational principles** "which all behavior analysts should strive to embody" (p. 4)



Continually evaluating the boundaries of their competence; working to continually increase their knowledge and skills related to cultural responsiveness and service delivery to diverse groups

26



Chart by the Institute of Trauma and Trauma-Informed Care (2015

27

Towards trauma-informed applications

Barriers:

- Effect of trauma "Internal experience"
 - Evidence- presence/absence of trauma

• Causes of trauma

- ABA focuses on how behavior is affected by environment in the moment.
- However, we must take into account the history of trauma in planning our treatment
- Evidence lack of data informed best practices for providing TIC



Towards trauma-informed applications

Possible Framework:

- The acknowledgment of trauma and its potential impact as an overarching mission.
- Ensure safety (e.g., physical and emotional) as well as trust
- Promote choice and shared governance
- Emphasize skill building



29

Assent Based Model

What is assent based care?

How can we employ a model that is effective with the ASD community?

Consent vs. Assent

Possible topographies of assent/assent withdrawal

4 core principles of the code

Concurrent chains schedule



30

Risk Benefit Analysis

WORKSHEET 9.1.1 RISK-BENEFIT ANALYSIS TEMPLATE MODIFIED FROM BAILEY AND BURCH (2016)

Situation:	
Decision:	
Risks	Notes/Analysis
(1)	
(2)	
(3)	
(4)	
(5)	in the Angel mig
Benefits	Notes/Analysis
(1)	
(2)	
(3)	
(4)	
(5)	
	us benefits for decision:
Source: Bailey, J., & Burch, M	M. (2016). Ethics for behavior analysis (3rd ed.). New York, NY: Routledge



Risk Benefit Analysis of Rapid Toilet Training

Risks:

- May increase problem behavior
- They may still not make rapid progress
- Rapid toilet training may cause increased stress on the client
- Parents may not have the time or resources to implement in the home
- May not generalize to other settings

Benefits:

- This is the intervention that is most in line with familial values
- The client does not have a lot of preference
- This would allow for the client to attend more community-based settings
- May see a decrease in problem behavior surrounding changes



Risk Benefit Analysis of Intervening on Stereotypy

Risks:

- Impact the child's ability to self-regulate
- Increase other uncomfortable sensations internally
- Change topographies into more intrusive/dangerous stereotypy

Benefits:

- Will allow the client more learning opportunities
- The child may be more readily available to engage in functional play activities
- Will decrease injury caused by dangerous stereotypy
- Will allow parents to take client to more community-based settings
- Increase functional play and social skills



The time is NOW



Do the best you can until you know better. Then when you know better, do better.

Maya Angelou

The time is now to make the implementation of trauma informed treatment approaches the forefront of ABA services.



Photo credit Boston College

Questions or Discussion





Behavior Analyst Certification Board. (2020). Ethics code for behavior analysts. https://bacb.com/wp-content/ethics-code-for-behavior-analysts/

Copeland, W. E., Shanahan, L., Hinesley, J., Chan, R. F., Aberg, K. A., Fairbank, J. A., van den Oord, E. J., & Costello, E. J. (2018). Association of Childhood Trauma Exposure with adult psychiatric disorders and functional outcomes. *JAMA Network Open*, 1(7). https://doi.org/10.1001/jamanetworkopen.2018.4493

Gover, H. C., Hanley, G. P., Burton, A. Y., Henley, A. J., & Pinkston, J. W. (2016). Practical functional assessment and treatment of pediatric food selectivity (dissertation).

Hagopian, L. P., Fisher, W. W., Sullivan, M. T., Acquisto, J., & LeBlanc, L. A. (1998). Effectiveness of functional communication training with and without extinction and punishment: A summary of 21 inpatient cases. Journal of Applied Behavior Analysis, 31(2), 211–235. https://doi.org/10.1901/jaba.1998.31-211

Hanley, G. P., Piazza, C. C., Fisher, W. W., & Maglieri, K. A. (2005). On the effectiveness of and preference for punishment and extinction components of function-based interventions. *Journal of Applied Behavior Analysis*, 38(1), 51–65. https://doi.org/10.1901/jaba.2005.6-04

Hornor, G. (2015). Childhood trauma exposure and toxic stress: What the PNP needs to know. Journal of Pediatric Health Care, 29(2), 191–198. https://doi.org/10.1016/j.pedhc.2014.09.006

Iwata, B. A., Dorsey, M. F., Slifer, K. J., Bauman, K. E., & Richman, G. S. (1994). Toward a functional analysis of self-injury. Journal of Applied Behavior Analysis, 27(2), 197–209. https://doi.org/10.1901/jaba.1994.27-197

Kunnavatana, S. S., Bloom, S. E., Samaha, A. L., Slocum, T. A., & Clay, C. J. (2018). Manipulating parameters of reinforcement to reduce problem behavior without extinction. *Journal of Applied Behavior Analysis*, 51(2), 283–302. https://doi.org/10.1002/jaba.443

Lerman, D. C., & Vorndran, C. M. (2002). On the status of knowledge for using punishment: Implications for treating behavior disorders. *Journal of Applied Behavior Analysis*, 35(4), 431–464. https://doi.org/10.1901/jaba.2002.35-431

Lerman, D. C., Iwata, B. A., & Wallace, M. D. (1999). Side effects of extinction: Prevalence of bursting and aggression during the treatment of self-injurious behavior. *Journal of Applied Behavior Analysis*, 32(1), 1–8. https://doi.org/10.1901/jaba.1999.32-1

López, C. M., Andrews, A. R., Chisolm, A. M., de Arellano, M. A., Saunders, B., & Kilpatrick, D. G. (2017). Racial/ethnic differences in trauma exposure and mental health disorders in adolescents. *Cultural Diversity and Ethnic Minority Psychology*, 23(3), 382–387. https://doi.org/10.1037/cdp0000126



McLaughlin, D. F., Wade, C. E., Champion, H. R., Salinas, J., & Holcomb, J. B. (2009). Thromboembolic complications following trauma. Transfusion, 49. https://doi.org/10.1111/j.1537-2995.2008.01989.x

Patel, M. R., Piazza, C. C., Layer, S. A., Coleman, R., & Swartzwelder, D. M. (2005). A systematic evaluation of food textures to decrease packing and increase oral intake in children with pediatric feeding disorders. *Journal of Applied Behavior Analysis*, *38*(1), 89–100. https://doi.org/10.1901/jaba.2005.161-02

Penrod, B., Gardella, L., & Fernand, J. (2012). An evaluation of a progressive high-probability instructional sequence combined with low-probability demand fading in the treatment of food selectivity. *Journal of Applied Behavior Analysis*, 45(3), 527–537. https://doi.org/10.1901/jaba.2012.45-527

Petscher, E. S., & Bailey, J. S. (2008). Comparing main and collateral effects of extinction and differential reinforcement of alternative behavior. Behavior Modification, 32(4), 468–488. https://doi.org/10.1177/0145445507309032

Reed, F. D., & Lovett, B. J. (2007). Views on the efficacy and ethics of punishment: Results from a National Survey. International Journal of Behavioral Consultation and Therapy, 4(1), 61–67. https://doi.org/10.1037/h0100832

Schreck, K. A., Williams, K., & Smith, A. F. (2004). A comparison of eating behaviors between children with and without autism. *Journal of Autism and Developmental Disorders*, 34(4), 433–438. https://doi.org/10.1023/b:jadd.0000037419.78531.86

Sharp, W. G., Jaquess, D. L., Morton, J. F., & Herzinger, C. V. (2010). Pediatric feeding disorders: A quantitative synthesis of treatment outcomes. *Clinical Child and Family Psychology Review*, 13(4), 348–365. https://doi.org/10.1007/s10567-010-0079-7

Stack, A., & Lucyshyn, J. (2018). Autism spectrum disorder and the experience of traumatic events: Review of the current literature to inform modifications to a treatment model for children with autism. *Journal of Autism and Developmental Disorders*, 49(4), 1613–1625. https://doi.org/10.1007/s10803-018-3854-9

Taylor, T., & Taylor, S. A. (2022). Social validity of pediatric feeding treatment components across time. Behavioral Interventions. https://doi.org/10.1002/bin.1879

Tereshko, L., Weiss, M. J., & Olive, M. L. (2021). Ethical considerations of behavioral feeding interventions. Behavior Analysis in Practice, 14(4), 1157–1168. https://doi.org/10.1007/s40617-021-00559-7

U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration. (2014). Samhsa's concept of trauma and guidance for a trauma-informed approach. Retrieved June 10, 2022, from https://store.samhsa.gov/sites/default/files/d7/priv/sma144884.pdf

Vollmer, T. R. (2002). Punishment happens: Some comments on Lerman and Vorndran's review. Journal of Applied Behavior Analysis, 35(4), 469–473. https://doi.org/10.1901/jaba.2002.35-469



Altman, K., & Krupsaw, R. (1982). Increasing eye contact by head-holding. Analysis and Intervention in Developmental Disabilities, 2(4), 319–327. https://doi.org/10.1016/0270-4684(82)90027-1

Azrin, N. H., & Foxx, R. M. (1971). A rapid method of toilet training the institutionalized retarded 1. *Journal of Applied Behavior Analysis*, 4(2), 89–99. https://doi.org/10.1901/jaba.1971.4-89

Cicero, F. R., & Pfadt, A. (2002). Investigation of a reinforcement-based toilet training procedure for children with autism. *Research in Developmental Disabilities*, 23(5), 319–331. https://doi.org/10.1016/s0891-4222(02)00136-1

Cunningham, A. B., & Schreibman, L. (2008). Stereotypy in autism: The importance of function. *Research in Autism Spectrum Disorders*, 2(3), 469–479. https://doi.org/10.1016/j.rasd.2007.09.006

Esposito, M., Pignotti, L., Mondani, F., D'Errico, M., Ricciardi, O., Mirizzi, P., Mazza, M., & Valenti, M. (2021). Stimulus control procedure for reducing vocal stereotypies in an autistic child. *Children*, 8(12), 1107. https://doi.org/10.3390/children8121107

Kazemi, E., Rice, B., & Adzhyan, P. (2019). *Fieldwork and Supervision for Behavior Analysts: A Handbook . SpringerPub*. Springer Publishing Company. Retrieved July 25, 2022, from https://www.springerpub.com/media/springer-downloads/9780826139122/Fieldwork-and-Supervision-for-Behavior-Analysts-Editable%20Worksheets.pdf.

Kroeger, K. A., & Sorensen-Burnworth, R. (2009). Toilet training individuals with autism and other developmental disabilities: A critical review. *Research in Autism Spectrum Disorders*, 3(3), 607–618. https://doi.org/10.1016/j.rasd.2009.01.005

Kupferstein, H. (2018). Evidence of increased PTSD symptoms in a utistics exposed to applied behavior analysis. Advances in Autism, 4(1), 19–29. https://doi.org/10.1108/aia-08-2017-0016



Leaf, J. B., Ross, R. K., Cihon, J. H., & Weiss, M. J. (2018). Evaluating Kuperstein's claims of the relationship of behavior al intervention to PTSS for individuals with autism. Advances in Autism, 4(3), 122–129. https://doi.org/10.1108/aia-02-2018-0007

O'Handley, R. D., Radley, K. C., & Whipple, H. M. (2015). The relative effects of social stories and video modeling toward increasing eye contact of a dolescents with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 11, 101–111. https://doi.org/10.1016/j.rasd.2014.12.009

Potter, J. N., Hanley, G. P., Augustine, M., Clay, C. J., & Phelps, M. C. (2013). Treating stereotypy in a dolescents diagnosed with autism by refining the tactic of "using STEREOTYPY as reinforcement." *Journal of Applied Behavior Analysis*, 46(2), 407–423. https://doi.org/10.1002/jaba.52

Péter, Z., Oliphant, M. E., & Fernandez, T. V. (2017). Motor Stereotypies: A Pathophysiological Review. Frontiers in Neuroscience, 11. https://doi.org/10.3389/fnins.2017.00171

Rajapakse, T., & Pringsheim, T. (2010). Pharmacotherapeutics of tourette syndrome and stereotypies in autism. *Seminars in Pediatric Neurology*, *17*(4), 254–260. https://doi.org/10.1016/j.spen.2010.10.008



Thank you for joining us!



Changing Lives. One child at a time. One professional at a time.