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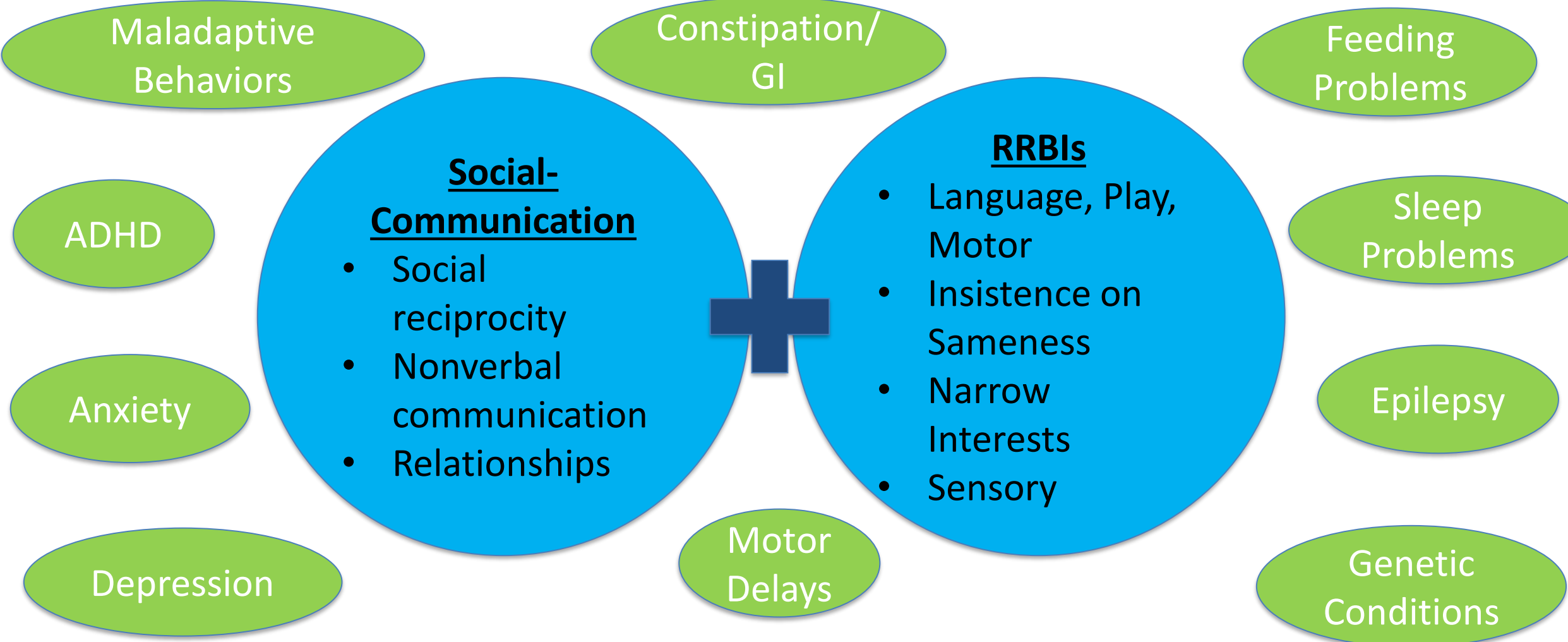
April 8th, 2026

NEW AND COMPLEMENTARY THERAPIES FOR AUTISM: OPENING DOORS AND COVERING QUACKS, PART 2: BEHAVIORAL INTERVENTIONS

AGENDA AND GOALS

- Review behavior interventions for ASD that are:
 - Evidence Based Interventions
 - Emerging Interventions
 - Not Supported
- Examine the concept of Pathological Demand Avoidance (PDA)
- Consider why autism is such a target for misinformation
- Discuss techniques for correcting misinformation

Intellectual Functioning



Language Skills



AUTISM SPECTRUM DISORDER (ASD)

Fertile area for pseudoscience

- People who want/need help, and lots of confusing/contradictory information
- ASD is relatively new concept (first described in 1940s)
 - Attention problems (1798)
 - Depression (as term 1800s; “melancholia” in ancient Greece)
- Effective treatment takes time; gains can be small
- Quality Research is difficult to do

We owe it to our families and patients to help make sense of the noise



EVIDENCE BASED PRACTICE IN ASD



EVIDENCE-BASED PRACTICE (EBP)



Keep in mind

- EBP in ASD is evolving
- Autistic community priorities
 - Historical context
 - Language
 - Autism Research at the Crossroads
by Brady Huggett (January 2023) <https://doi.org/10.53053/TCFY1384>
- Misinformation, pseudoscience
 - Jason C. Travers, PhD, BCBA-D (2023), chapter 17, pg 282-296

Goals of Intervention Across the Lifespan



- Maximizing functional independence, health and well-being, quality of life
- Minimizing impact of difficulties
- Reducing impact of maladaptive behaviors

**Behaviorally-based methods
are the foundation for
most evidence-based
supports for ASD**

- Antecedent-based Interventions
- Augmentative and Alternative Communication
- Behavioral momentum intervention
- Cognitive behavioral/instructional strategies
- Differential Reinforcement of alternative, incompatible, or other behavior
- Direct Instruction
- Discrete Trial Training
- **Exercise and Movement**
- Extinction
- Functional Behavioral Assessment
- Functional Communication Training
- Modeling
- **Music-mediated intervention**
- Naturalistic intervention
- Parent-implemented intervention
- Peer-based instruction and intervention
- Prompting
- Reinforcement
- **Response**
- interruption/redirection
- Self-management
- **Sensory integration**
- Social narratives
- Social skills training
- Task analysis
- Technology-aided instruction and intervention
- Time delay
- Video modeling
- Visual supports

Hume, K., Steinbrenner, J. R., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yucesoy-Ozkan, S., & Savage, M. N. (2021). Evidence-Based Practices for Children, Youth, and Young Adults with Autism: Third Generation Review. *Journal of Autism and Developmental Disorders*, 51, 4013-4032

Orientation

Behavioral

Methodology

Applied Behavior Analysis (ABA)

Examples

- Reinforcement (e.g., DRI, DRO)
- Modeling
- Functional Assessment
- Prompting
- Response Interruption
- Redirection
- Extinction
- Task Analysis
- **Discrete Trials Training (DTT)**

Mode of Delivery

**Clinician-led (EIBI) vs
Parent-mediated (RUBI)**

**Comprehensive (EIBI) vs
Targeted (Sleep)**

What is ABA?



DISCRETE TRIALS - DT (One to One- Knee to Knee)

NATURAL ENVIRONMENT TEACHING - NET (Naturalistic Learning)

VERBAL BEHAVIOR (Communication Skills)

PRECISION TEACHING (Fluency Training)

SELF-MANAGEMENT SKILLS
(Following Schedules, Toilet Training, Brushing Teeth, Showering, Dressing)

DESENSITIZATION
(Tooth Brushing, Dentist, Hair Cut, Nail Cut, Medication)

CONDITIONING
(Expanding Leisure Skills and Interest)

LEISURE ACTIVITY (Puzzles, Independent Play)

COMMUNITY SKILLS (Tolerating Settings: Haircuts, Dentist, Doctors, Shopping)

INCLUSION (Typical Setting- 1st with support of behaviorist - then independent)

SOCIAL SKILLS (With Peers, Play Skills, Parallel Play, Family Interaction)

VOCATIONAL SKILLS (Job Readiness)

Early Intensive Behavioral Intervention (EIBI)

- **20-40 hours per week of one-to-one treatment**
- ABA methods
- “Early” typically means <5 years
- **Considered standard of care for toddlers and preschoolers with ASD**
 - Communication, adaptive skills, cognition (Rogers & Vismara, 2008; Smith & Iadarola, 2015)

Naturalistic Developmental Behavioral Intervention (NDBI)

- Emphasizes naturally occurring contexts (e.g., daily routines, play)
- Emphasis on encouraging spontaneous initiations
- Behaviorally-based
- Examples
 - Reciprocal Imitation Training, Pivotal Response Training, Early Start Denver Model

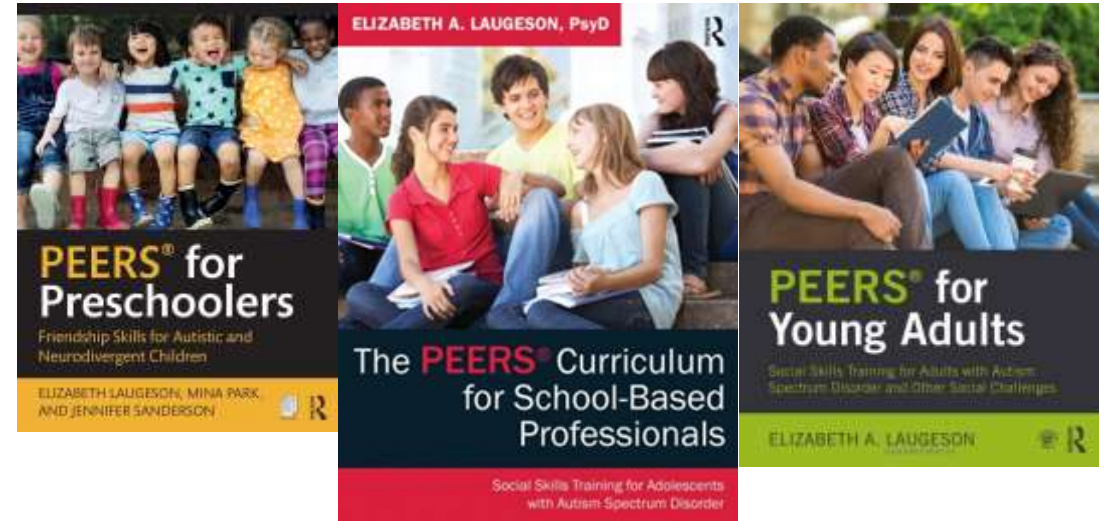
Communication



- Augmentative and Alternative Communication (AAC)
 - Functional Communication Training (FCT)
 - Picture Exchange Communication System® (PECS)
 - Devices



Social Skills

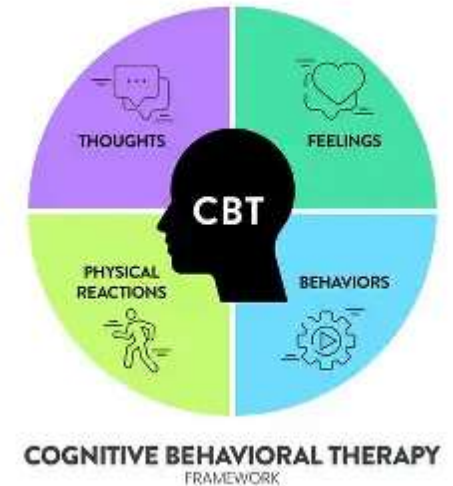
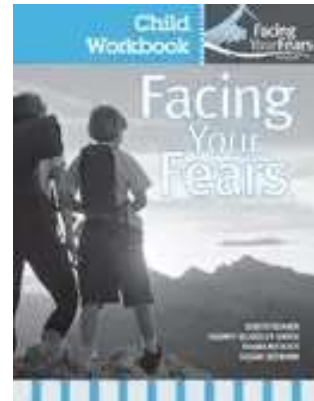


- Manualized, structured curricula
 - PEERS®, Skillstreaming



Emotion Regulation

- Cognitive Behavioral Therapy (CBT)
 - Unified Protocol (transdiagnostic CBT)
 - Manualized, structured curricula



Associated Concerns

- Parent Training/Coaching (e.g., PCIT, RUBI)
 - Aggression, meltdowns, self-injury
- Sleep, Toileting, Feeding Therapies
- Executive Functioning (e.g., Unstuck and On Target!)





EMERGING INTERVENTIONS

More Data Needed

- Technology
 - Extended, augmented, virtual reality
 - Telehealth mode of implementation
- Music Therapy
- Animal-assisted Therapy
- Art Therapy
- Exercise and Movement

Lost in the Experimental Zone

- **Ideal World:** Timely, quality research completed to show it works or does not
 - Intervention is not widely used until supported; discarded quickly if not
- **Reality:** Interventions can live in the "experimental zone" for long periods
 - Quality research showing objective change takes a long time
 - Intervention often being used during this time
 - Body of "promising" evidence is established
 - Studies published showing feasibility and that families, kids and clinicians like it!
 - Minimal to No evidence showing it leads to meaningful changes in functioning or quality of life...
 - Increased use = more difficult to stop if evidence does not support

NOT SUPPORTED

Not Supported

- Facilitated Communication
 - Rapid Prompting, SomaRPM; Speak through Spelling; Spelling to communicate (S2C); Spellers Method
- Audio Integration
 - Integrated Listening Systems
- Psychomotor Patterning
 - Anat Baniel Method; Neuromovement
- Holding Therapy

Not Supported: Facilitated Communication

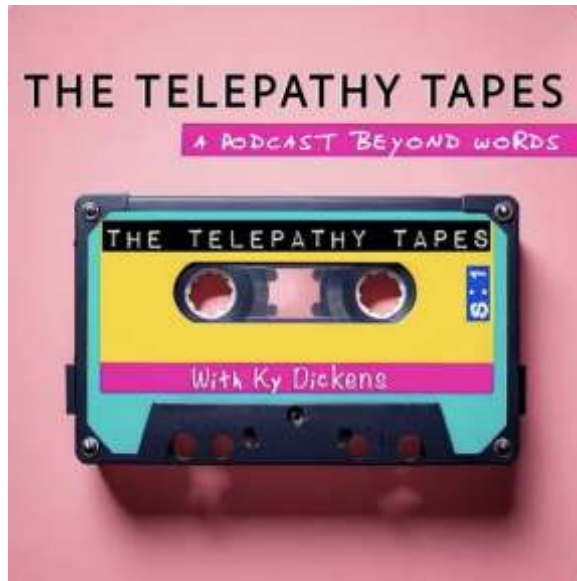


Not Supported: Facilitated Communication

- Pseudoscience theory: physical ailment ("praxis") prevents autistic individuals from communicating
 - No ailment ever been demonstrated (Jacobson et al, 1995)
- Intervention: therapist "facilitates" communication by guiding autistic person's hand or arm to spell out words
- **Evidence clearly shows: Facilitator is speaking, not individual with Autism** (review article, Mostert, 2001)

They Just Keep Coming Back!

- Unsupported Interventions often continue
 - Done by small groups under the radar
 - Return under new names



S()MA®RPM

S2C

What's the Harm?

- Wasted Time, Energy, and Money!
 - Often done in place of evidence-based treatment
- Unexpected harms
 - FC led to multiple false allegations of abuse
 - Holding therapy has caused trauma and death
 - Audio integration can be harmful

COMMON ASSOCIATED
TOPIC: PATHOLOGICAL
DEMAND AVOIDANCE

PATHOLOGICAL DEMAND AVOIDANCE (PDA)

PDA as a concept

- Controversial
- Lacks consensus in definition, scope, measurement, language, intervention, etc from stakeholders – PDAers, professionals, family members
- Formally recognized in UK, Australia
- Limited research

PDA

Recent systematic review²¹ identified 13 studies total, and highlighted numerous methodological limitations

- Confounding factors not identified (nor controlled)
- Objective measurement lacking
- Reliance on parent report for inclusion and symptom characterization
- Sampling concerns



Helpful approaches for a PDA profile of autism

Conventional support strategies, including those often recommended for ASD, are often ineffective and counter-productive with a PDA profile. In place of structure, routine, firm boundaries, praise, rewards/consequences, is a person-centred approach based on negotiation, collaboration and flexibility.



The PDA PANDA symbolises the need to tailor the

environment to meet needs and our P A N D A mnemonic is a simple reminder of helpful approaches.

For more information please visit www.pdasociety.org.uk

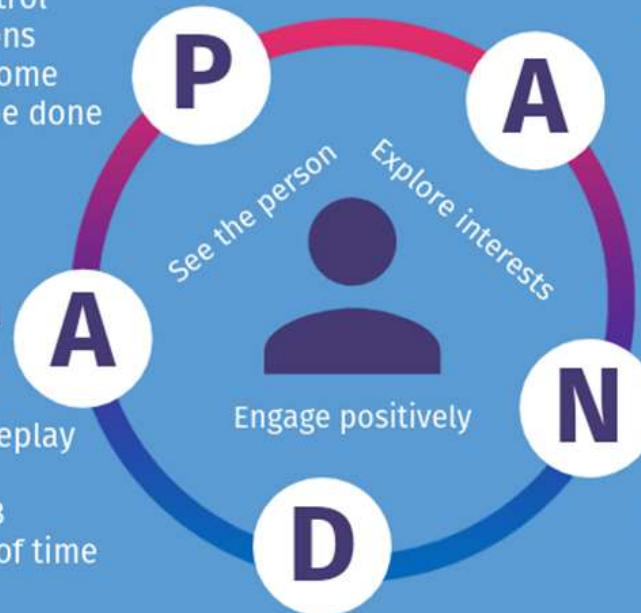
Pick battles
Anxiety management
Negotiation & collaboration
Disguise & manage demands
Adaptation

Pick battles

- Minimise rules
- Enable some choice & control
- Explain reasons
- Accept that some things can't be done

Anxiety management

- Reduce uncertainty
- Recognise underlying anxiety & social/sensory challenges
- Think ahead
- Treat meltdowns as panic attacks: support throughout & move on



Adaptation

- Try humour, distraction, novelty & roleplay
- Be flexible
- Have a Plan B
- Allow plenty of time

Negotiation & collaboration

- Keep calm
- Proactively collaborate & negotiate to solve challenges
- Fairness & trust are central

Disguise & manage demands

- Word & position requests indirectly
- Constantly monitor tolerance for demands & match demands accordingly
- Doing things together helps

AGE OF MISINFORMATION

- The amount of information on Autism is overwhelming
 - Avg parent doesn't have time, training, or resources to review alllllll the info and make evidence-based decisions
 - Providers often recommend unsupported treatments (Frame & Casey, 2019; McCormack et al., 2020; Miller et al., 2012).
- Our brains are wired to often surpass critical thinking
 - **Narrative Bias** – personal stories sway more easily than data
 - **Confirmation bias** – we unconsciously seek info that matches what we already believe
 - **Internet amplifies both** – search and social media algorithms often favor emotionally charged info that matches other stuff we already looked at

HOW CAN PROFESSIONALS HELP?

- Correcting Misinformation is complex!
 - Well-intentioned, but ineffective corrections can inadvertently strengthen a belief in misinformation
 - Repeating the belief, even to counter it, can strengthen it
 - Beliefs can be connected to core identity – correction can feel like an attack
 - Experts are not always the best communicators – we do not speak in certainties; can come off as impersonal

HOW CAN PROFESSIONALS HELP?

- What to do when faced with misinformation?
 - **Avoid arguing**
 - often strengthens belief and weakens family's trust in you
 - **Reaffirm family's values; Find common ground**
 - “you are working so hard to find the most effective interventions to help your child be happy and achieve their full potential”
 - **Provide counternarrative consistent with beliefs**
 - “While on the surface it sounds amazing, this intervention does not have any actual objective support to show it is worth your valuable time and resources”
 - **Use clear, informative language** that avoids jargon, along with well-designed visuals
 - Correction most effective when **focuses also on WHY info is wrong and HOW people came to believe** this information in the first place
 - helps people not feel dumb or silly for believing it

HOW CAN PROFESSIONALS HELP?

- **Misinformation Inoculation**

- Starts before family brings misinformation to you
- Provide basic info on supported treatment and quick overview of how to evaluate a treatment
- Explain that unsupported treatments exist and often give "evidence" that looks like support but is not (personal testimonies; poorly designed studies)
- Quick explanation of placebo effect – anything we put a lot of time, energy, and money into can lead to us seeing effects that may not be real
 - If it sounds too good to be true, it likely is!

FOR YOUR CONSIDERATION

