Strategies for Managing Anxiety Disorders in Youth with ASD: It's All About Interprofessional Collaboration

The Intersection of ASD & Anxiety
3/18/22

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OBJECTIVES

1. Attendees will be able to identify the benefits of interprofessional collaboration when working with individuals with autism and anxiety disorders and other brain health concerns
2. Attendees will be able to describe tools for effective collaboration in decision making as part of an interprofessional team when working with individuals with autism and anxiety disorders and other brain health concerns.
3. Attendees will be able to identify potential medications, the effects, and side effects of those medications to treat anxiety disorders in individuals with autism and anxiety disorders.
4. Attendees will be able to identify potential effects of drug and behavior interactions when working with individuals with autism and anxiety disorders.

The Agenda

1. Background: ASD and co-occurring mental health disorders
2. Defining and deconstructing anxiety
3. Anxiety disorder subtypes
4. Interprofessional assessment of anxiety
5. Assessment and treatment of anxiety disorders
6. Case example
7. Concluding thoughts

Autism Spectrum Disorder (ASD)

- According to the National Institute of Mental Health, ASD is:
  - Ongoing social problems that include difficulty communicating and interacting with others
  - Repetitive behaviors as well as limited interests or activities
  - Symptoms that typically are recognized in the first two years of life
  - Symptoms that hurt the individual's ability to function socially, at school or work, or other areas of life

- Prevalence is currently 1 in every 44
  - 4.2 times as prevalent among boys (3.7%) as among girls (0.9%)
  - ASD is reported to occur in all racial and ethnic groups

Autism Spectrum Disorder and Co-occurring Mental Health Conditions

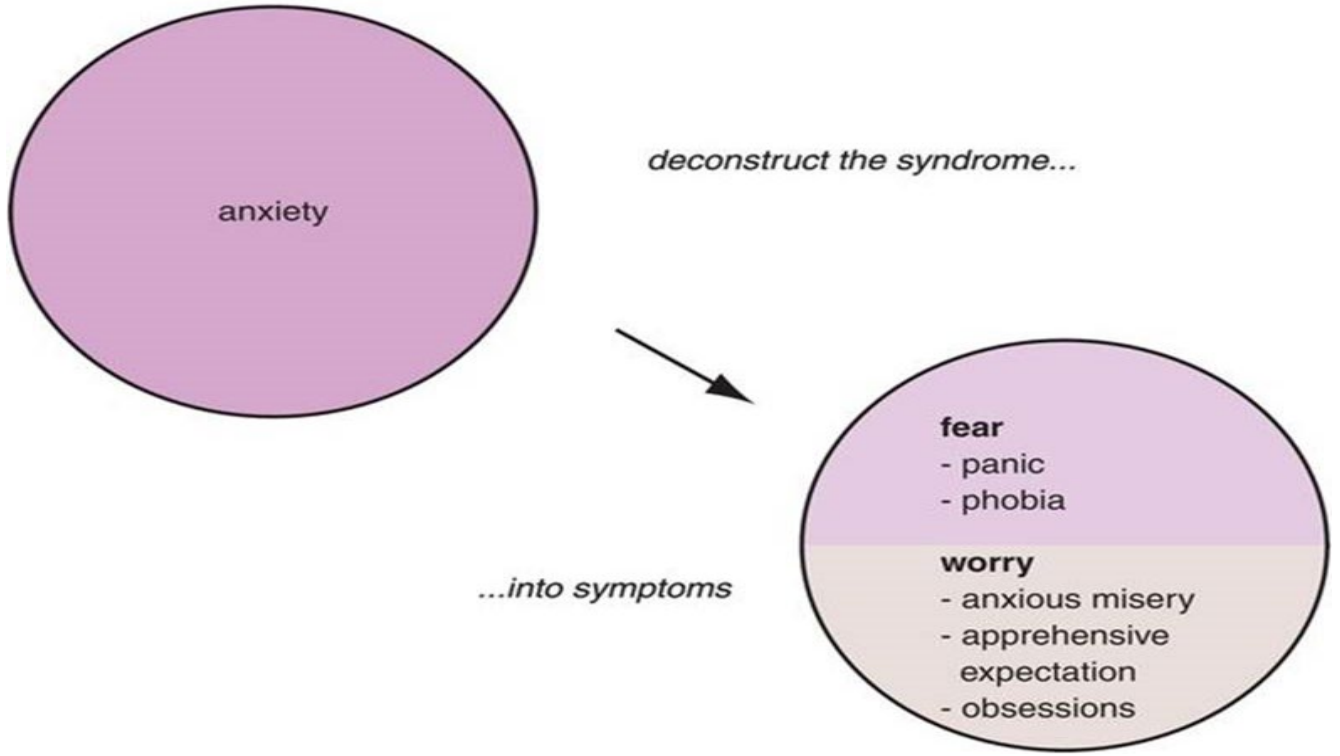
- 78% of children with ASD had at least one mental health condition
  - nearly half had two or more

- The most common mental health conditions seen in children with ASD
  - Behavior/Conduct problems (60.8%),
  - **Anxiety** (39.5%),
  - ADD or ADHD (48.4%)
  - Depression (15.7%)

So what is anxiety?

- A complex pattern of reactions to a perceived threat
  - Cognitive
    - Forgetfulness, rumination, poor judgment, decreased attention
  - Behavioral
    - Running away, anxious tapping, restless leg, aggression, trembling, or closing eyes
  - Physiologic
    - Tachycardia, tachypnea, diaphoresis, increased blood pressure, palpitations, chest tightness, muscle tension, GI upset
  - Subjective
    - Irritability, helplessness, hopelessness, anger, decreased motivation, fear, images of bodily harm

How is anxiety different than fear?



When does anxiety become a symptom or disorder?

- Anxiety disorders involve intense and persistent fear/worry
  - These feelings:
    - Are **extreme** for the developmental stage
    - **Interfere** with daily functioning/attainment of milestones
    - And no matter how how much you try to reassure or reason with the person, these feelings are not dispelled

ANXIETY AND AUTISM

A child's behaviour may tell you more than their words

WHAT IS ANXIETY?

Anxiety refers to a group of disorders that cause nervousness, fear, apprehension, and worry. Most people experience anxiousness at some time and a little anxiety may even aide performance. But severe anxiety can impact on physical, cognitive and behavioural functioning and well-being.

40%

OF CHILDREN WITH AUTISM ARE DIAGNOSED WITH AN ANXIETY DISORDER

ANXIETY IN AUTISM

Many children with autism are anxious. About 40% will receive a clinical diagnosis of an anxiety disorder, but another 20-30% will experience heightened anxiety. One of the most common types of anxiety in autism is an intolerance of uncertainty. This may mean children ask a lot of questions, need routine and predictability and get very worried before going to new places or trying new things.

SPOTTING SIGNS

Anxiety may look different in some children with autism. Signs of anxiety in autism can be difficult to spot because they look similar to characteristics of autism. Some of the signs of anxiety that we have found in our research that you might not expect to see as signs of anxiety include crying, hiding or running away, a change in the volume or speed of speech, becoming angry, becoming sensitive to lights or noise, noncompliance, mouthing objects and self harm. Many children with autism also tell us that when they get worried they try to "act normal".

SIGNS TO LOOK FOR

ANGER | CRYING | TRYING TO ACT NORMAL | HIDING | SCARED

BE AWARE OF THE POSSIBILITY THAT A CHILD'S BEHAVIOURS RATHER THAN THEIR WORDS MAY BE YOUR BEST INDICATOR OF THEIR ANXIETY. BEHAVIOUR MAY BE THEIR LOUDEST VOICE.

www.facebook.com/AutismCentreExcellence
Research undertaken with the assistance of a Queensland Government Education Horizon grant
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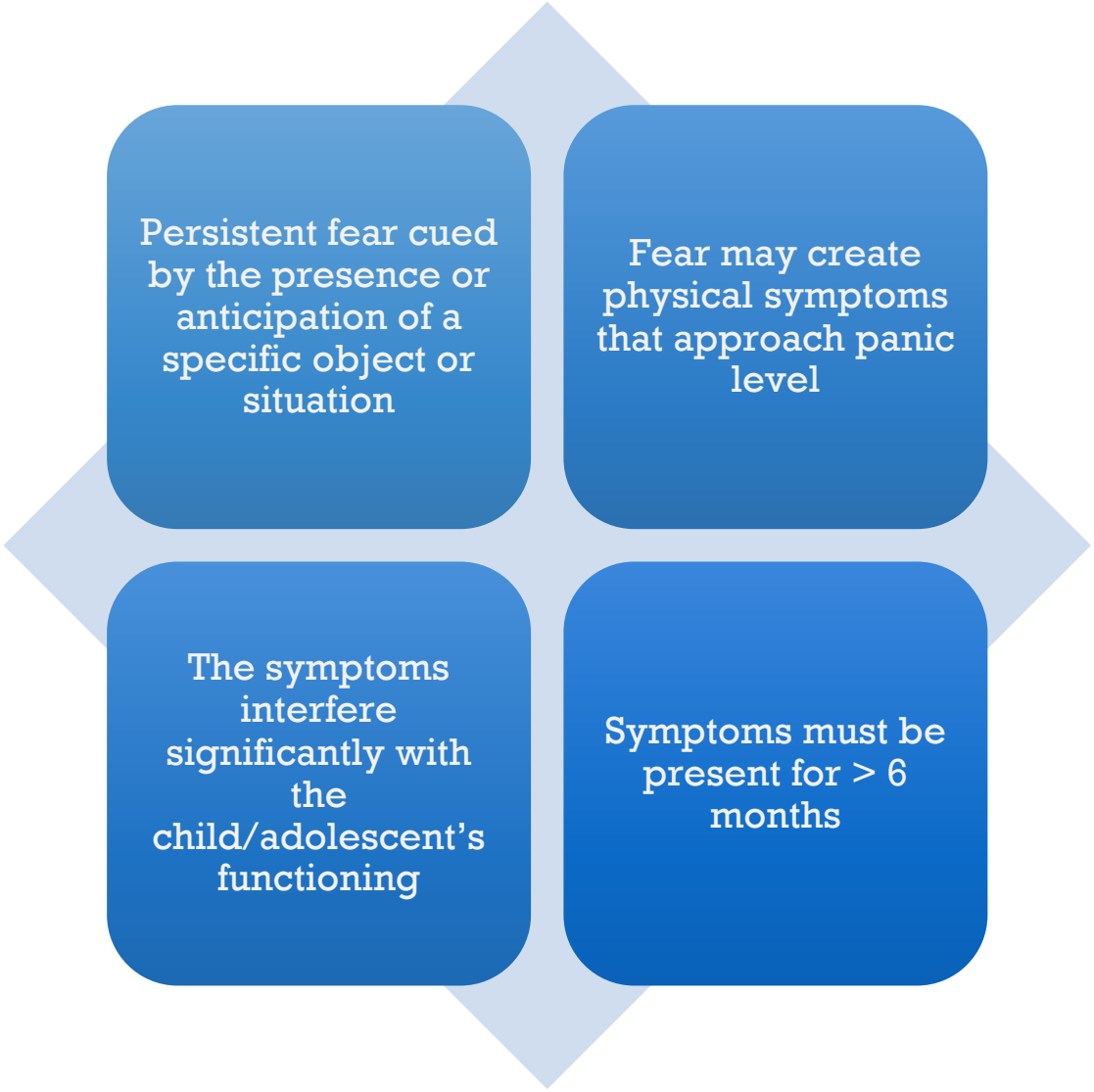
Anxiety Disorder Subtypes

Anxiety Diagnoses in Youth with ASD:

- Specific phobia (30%)
- Social phobia (17%)
- Obsessive compulsive disorder (17%)
- Generalized anxiety disorder (15%)
- Separation anxiety disorder (9%)
- Panic disorder (2%)
- *Acute stress disorder*
- *Posttraumatic stress disorder*

Specific Phobia:



SPECIFIC PHOBIA - TRIGGERS

Someone with a specific phobia (e.g. Arachnophobia) could be triggered in a variety of ways.

Barends

SIGHT

Someone with Arachnophobia sees a spider.

The spider, and possibly the spider's web, trigger the Arachnophobic fears.



The person experiences anxiety, racing heart, fright, is shaky and wants to leave the situation as soon as possible.

SMELL

Someone with a fear of cheese (Turophobia) smell s cheese.

The smell of cheese is very repulsive and produces cheese-related thoughts and memories.



The person experiences disgust, anxiety, starts sweating and shaking, and wants to leave the situation.

IMAGINATION

Someone with a fear of snakes (Ophidiophobia) thinks of a snake.

Imagining how an encounter with a snake would be like, immediately affects the person.



The person experiences hot and cold flashes, trembling, fright, shortness of breath and trouble relaxing

SOUND

Someone with a fear of loud sounds (Phonophobia) sees how someone blowing up a balloon.

Watching the balloon blow up beyond its normal capacity is very unsettling.



The popping of the balloon can produce a panic attack and trouble breathing.

TASTE

Someone with a fear of sourness (Acerbo-phobia) has to attend a dinner party and sees lemons in a fruit basket.

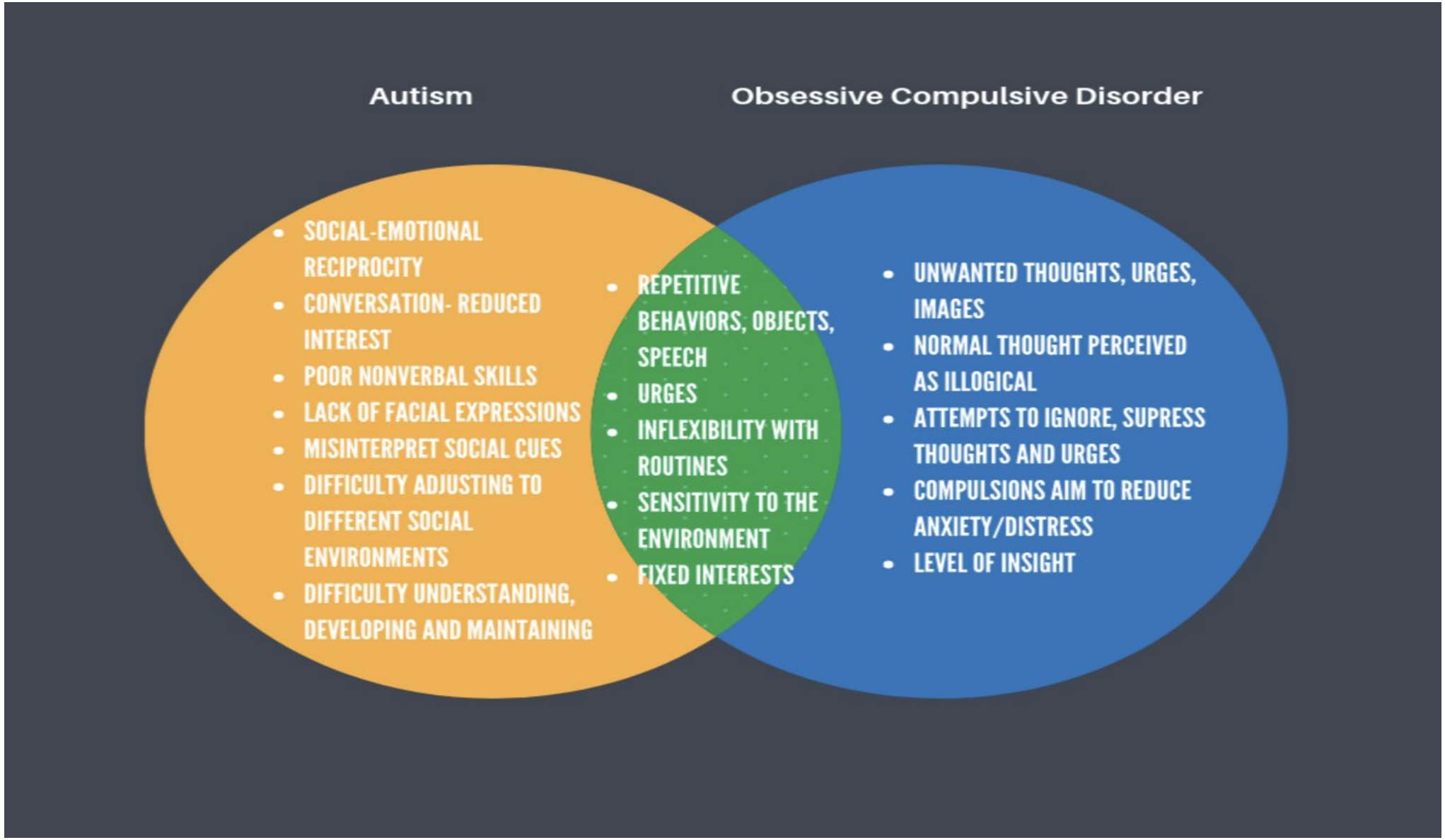
The idea that the lemons will be used in the dishes is very unsettling.



Seeing the lemon causes him to experience trouble breathing, racing heart, sweatiness. He feels like going home before dinner.

Social Phobia:

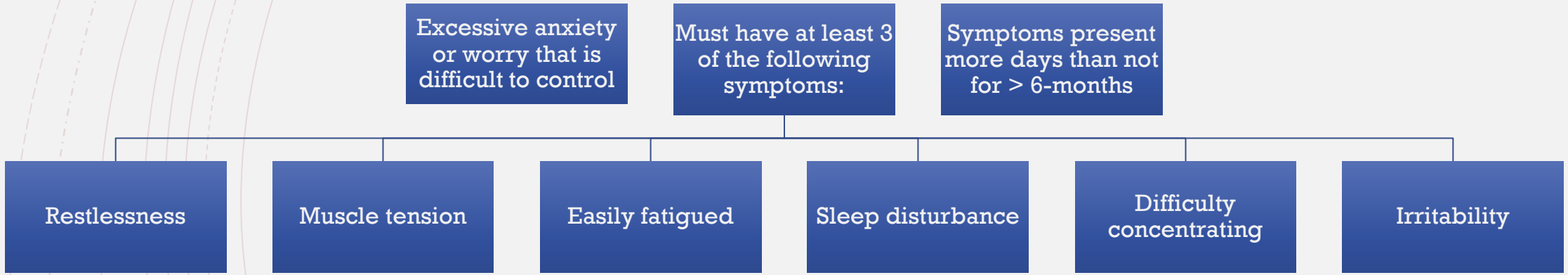
- Persistent fear of social or performance situations which the child/adolescent may be under the scrutiny of others
- Fear of acting in a humiliating or embarrassing way
- May reach panic levels when in the social situation
- School/age-appropriate social activities avoided


Autism
Obsessive Compulsive Disorder
SOCIAL-EMOTIONAL RECIPROCITY
CONVERSATION- REDUCED INTEREST
POOR NONVERBAL SKILLS
LACK OF FACIAL EXPRESSIONS
MISINTERPRET SOCIAL CUES
DIFFICULTY ADJUSTING TO DIFFERENT SOCIAL ENVIRONMENTS
DIFFICULTY UNDERSTANDING, DEVELOPING AND MAINTAINING
REPETITIVE BEHAVIORS, OBJECTS, SPEECH
URGES
INFLEXIBILITY WITH ROUTINES
SENSITIVITY TO THE ENVIRONMENT
FIXED INTERESTS
UNWANTED THOUGHTS, URGES, IMAGES
NORMAL THOUGHT PERCEIVED AS ILLOGICAL
ATTEMPTS TO IGNORE, SUPRESS THOUGHTS AND URGES
COMPULSIONS AIM TO REDUCE ANXIETY/DISTRESS
LEVEL OF INSIGHT

Separation Anxiety Disorder:

- Recurrent excessive fears about separation
- Developmentally inappropriate
- Avoidance of situations that require separation
- Causes clinically significant distress or impairment in social, academic, or other important areas of functioning
- Duration must be at least 4 weeks

Generalized Anxiety Disorder:



Panic Disorder:

Interprofessional Assessment of Anxiety Disorders in Youth with ASD

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Interprofessional Collaboration… What's it all about?

What is Interprofessional Collaboration?

A process of developing and maintaining effective interpersonal working relationships with practitioners, clients, families and communities to enable optimal health

Canadian Interprofessional Health Collaborative (2010). A national interprofessional competency framework.

What is Interprofessional Collaboration?

"...respectful, meaningful, and effective team behavior"
(Kiddo & Grant, 2009)

- **Interdependent professionals** taking collective action towards patients' care needs
- **Voluntary**
- Implies **negotiation**
  - Leave the competition at the door!

Kiddo, S & Grant, R (2014). Revisiting evidence-based checklists: interprofessionalism, safety culture and collective competence. Journal of Interprofessional Care 28(5), pgs. 390-392.

San Martin-Rodriguez, L., Beaulieu, MD., D'Amour, D. & Ferrada-Videla, M. (2005). The determinants of successful collaboration: a review of theoretical and empirical studies. Journal of Interprofessional Care S1, pgs. 132-147.

What is Interprofessional Collaboration?

- The team shares the responsibility for making the ultimate decision about a patient's care
  - Opinions are equally valued
- The plan is developed by the whole team
- Assessment and care plan reflect the integration of expertise from individual disciplines

"The whole is greater than the sum of its parts"

-Aristotle

WHEN IT COMES TO INTERPROFESSIONAL COLLABORATION, KNOW YOUR LANE!

It is critical that we recognize the limits of our knowledge and experience, plan for situations beyond our expertise, and provide appropriate referral to other health care providers as needed

Cashe, M.I., Kuebler, J, Bastida, M. & Chipps, S. (2012). How to collaborate effectively with psychiatric nurse practitioners. Current Psychiatry 11(11): pgs 49-53.

Who is on Our Interprofessional Team?

- Youth & Caregiver
- Medical
  - Primary care provider
  - Neurologist*
- Psychiatric
  - Psychiatric Nurse Practitioner
  - Psychiatrist
- Behavioral services
  - Psychologist*
  - Behavior analyst
  - Behavior specialist
- Care/Clinical Coordination
- Mental Health Therapists
  - Psychologist
  - Social worker
  - Art therapist
  - Licensed Mental Health Counselor
- Education
  - Administrators
  - Teachers
  - OT/PT*
  - SLP*
  - School Nurse
- Nutrition/Dietician

Assessment Of Anxiety

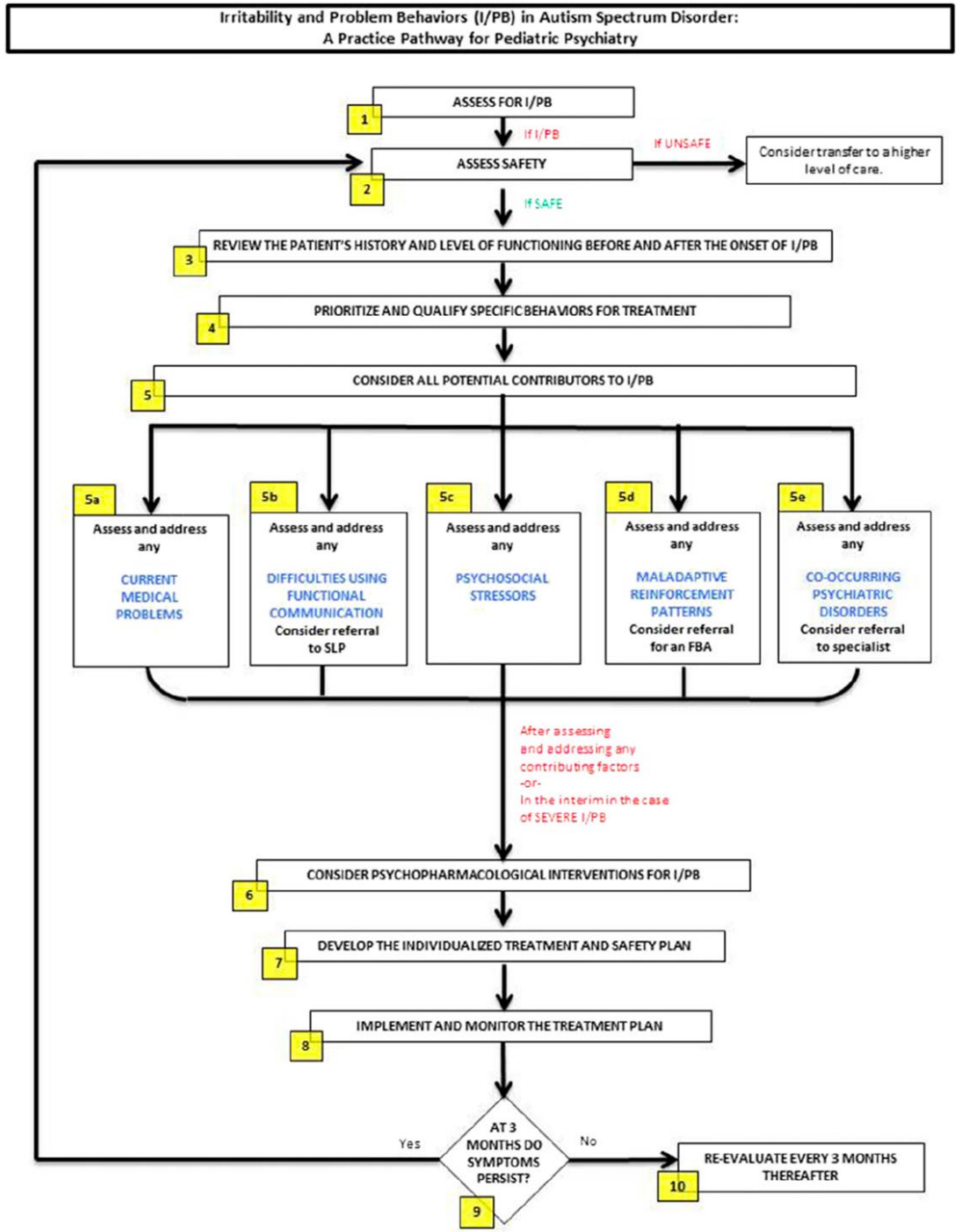

FIGURE 1
I/PB in ASD: A practice pathway for pediatric psychiatry.

Downloaded from http://publications.aap.org/pediatrics/article-pdf/137/Supplement_2/S136/884222/peds_20152851.pdf by St John Fisher user on 13 March 2022

Vasa et al. (2016)

Assessment of Anxiety

1. Perform a developmentally appropriate multi-informant and multi-method assessment
    a. Utilize multiple assessment modalities and informants
        i. Clinical interviews
        ii. Rating scales
        iii. Behavioral observations and assessments

Vasa, R. A., Mazurek, M. O., Mahajan, R., Bennett, A. E., Bernal, M. P., Nozzolillo, A. A., ... & Coury, D. L. (2016). Assessment and treatment of anxiety in youth with autism spectrum disorders. *Pediatrics*, *137*(Supplement_2), S115-S123.

Assessment of Anxiety

Challenges to assessment may be related to:

1. Language
2. Cognitive abilities
3. Complexity: comorbid conditions that overlap with ASD
4. Consider child and family stressors
5. Contribution of trauma

Vasa, R. A., Mazurek, M. O., Mahajan, R., Bennett, A. E., Bernal, M. P., Nozzolillo, A. A., ... & Coury, D. L. (2016). Assessment and treatment of anxiety in youth with autism spectrum disorders. *Pediatrics*, *137*(Supplement_2), S115-S123.

Assessment of Anxiety

- Clinical Interview:
  - Child self report:
    - Several factors such as age, verbal fluency and cognitive ability
    - Child's ability to understand their internal experience and express emotions
    - Consider open-ended questions, forced choice responses (yes/no) or visual analog scales
  - Caregiver report:
    - Observations about symptoms and behaviors across settings
    - Understand family history of anxiety disorders
      - Heritability
      - Perceptions of anxiety

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Assessment of Anxiety

- Rating Scales:
  - Screen for Child Anxiety Related Emotional Disorders (SCARED)
  - Multidimensional Anxiety Scale for Children (MASC)
  - Spence Children's Anxiety Scale (SCAS)

Vasa, R. A., Mazurek, M. O., Mahajan, R., Bennett, A. E., Bernal, M. P., Nozzolillo, A. A., ... & Coury, D. L. (2016). Assessment and treatment of anxiety in youth with autism spectrum disorders. *Pediatrics*, *137*(Supplement_2), S115-S123.

Assessment of Anxiety

- Physical exam
  - Vital signs and lab work

Rule out other medical or psychiatric explanations for the youth's presentation

- Mental status exam
  - Physical appearance
    - Tremors, hair twirling/pulling, bald spots, nail biting, skin picking/lesions secondary to picking, pacing, manner of dress, relatability, comfort with caregiver
  - Eye contact
  - Mood and affect
  - Manner of speaking
  - Thought processes and content

Vasa, R. A., Mazurek, M. O., Mahajan, R., Bennett, A. E., Bernal, M. P., Nozzolillo, A. A., ... & Coury, D. L. (2016). Assessment and treatment of anxiety in youth with autism spectrum disorders. *Pediatrics*, *137*(Supplement_2), S115-S123.

Assessment of Anxiety

- Are the there psychosocial stressors that need consideration?
- Are the educational and behavioral supports adequate?
- **What is the degree of anxiety related impairment?**
  - How much does anxiety interfere with the child's daily functioning across settings?

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Assessment of Anxiety

Behavioral Observations

1. Observe for fearful affect, clinginess, and increased repetitive behaviors, Irritability (Aberrant Behavior Checklist), disruptive behavior, aggression, worsening sleep problems, and self-injury (McGuire et al. 2016)
2. Avoidance may be because of fear of phobia, worry or rigid/repetitive behaviors. All can result in social avoidance of stimuli.
3. Fear and worry can be shaped and begin with rigid or repetitive behaviors. An unexpected change in routine (rigidity) results in taking a test that the person was unaware of (worry), now they are paired.
4. Ritualistic behavior may reduce anxiety or they also may be a preferred activity unrelated to negative affect (positive reinforcement).
5. Understanding function is very important and referral to a behavior analyst for assessment (FBA or FA) can be very important. (Vasa et al., 2016)

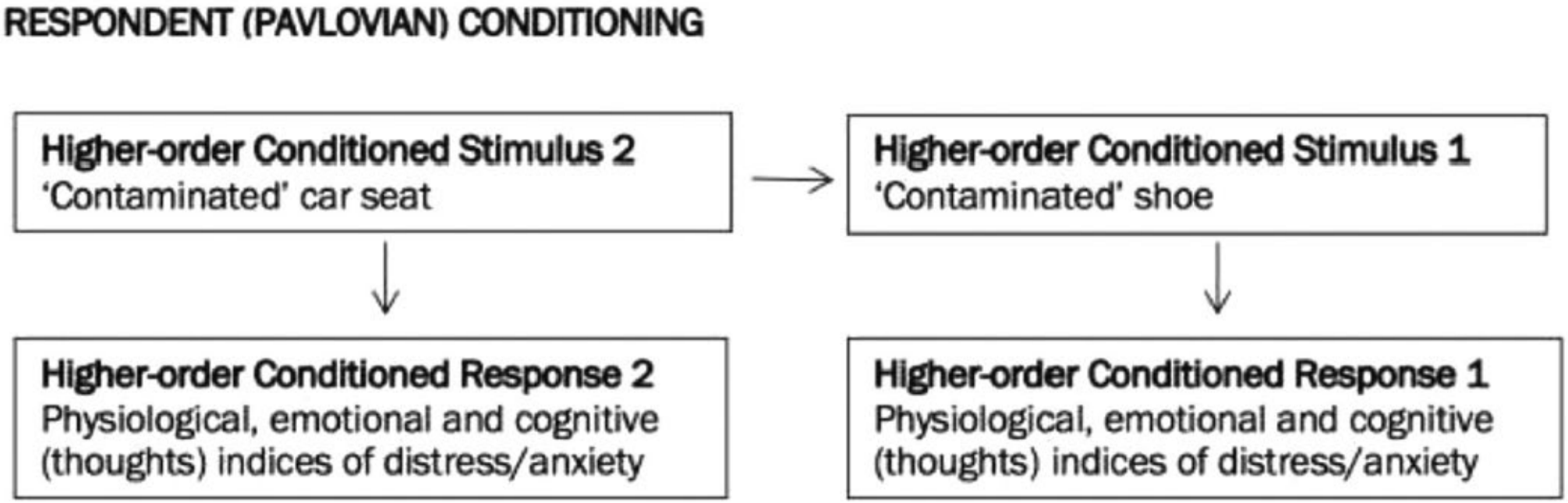
Behavioral Assessment

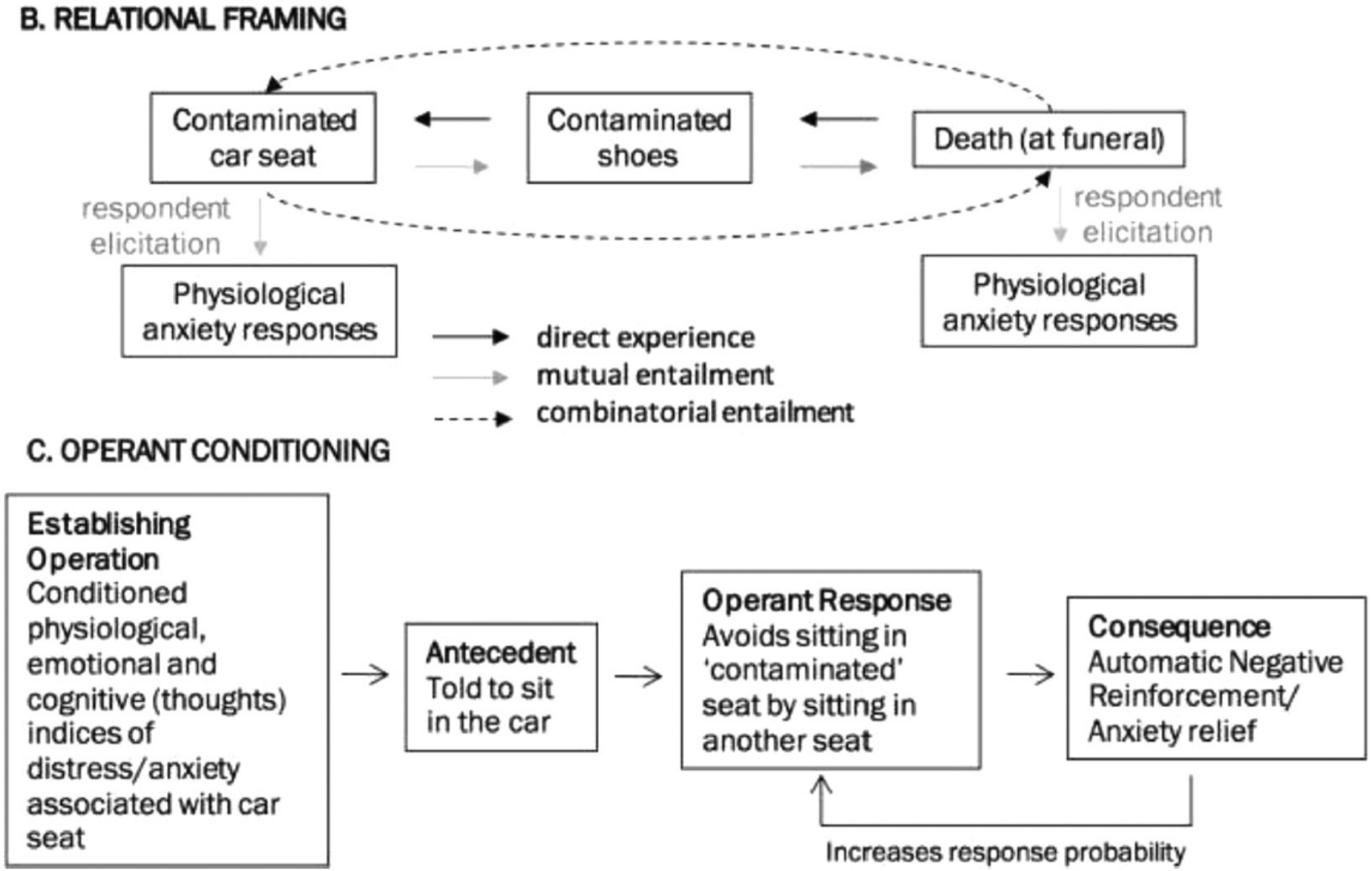
1. Anxiety Relief or Automatic Negative Reinforcement.
   a. The reinforcer is the avoidance or removal of a distressing stimulus in the individual's internal environment.
   b. Is it necessary to understand the difference between fear, phobia, and OCD in a behavioral assessment?
   c. maybe….
2. Direct observation, using Antecedent, Behavior, and Consequence data
3. Functional analysis

RFT approach to provide a more comprehensive behavioral theoretical basis for understanding OCBs. (Vause, et al., 2020)., (Guertin, E. L., et al. 2022)

Figure 1

Proposed Possible Learning Mechanisms for a Clinical Case Example Typical of the Processes Described by OCD (i.e., Automatic Negative Reinforcement) Based on the Mowrer's (1951) Two-Process Theory of Avoidance Behaviors (A and C) and RFT (B) Based on Diagrams by Törneke (2010)





(Guertin, E. L., et al. 2022)

Treatment of Anxiety

Domains of Treatment of Anxiety

1. Psychoeducation and coordination of care
2. Modified Cognitive Behavioral Therapy (CBT)
3. Behavioral Interventions
4. Medication Considerations

Psychoeducation and Coordination of Care

"The comprehensive care or medical home model for the care of ASD includes management of mental health and behavioral problems, which are far more prevalent in children with ASD" (Gurney JG, McPheeters ML, Davis MM, 2006)

Evidence-based Treatment Models

1. Behavior therapy: There is some evidence of the efficacy of behavior therapy such as CBT in reducing anxiety symptoms

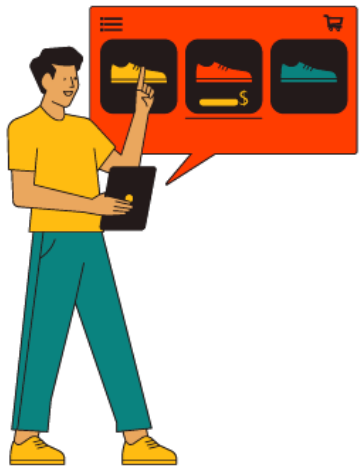
    a. CBT
    b. Dialectical Behavioral Therapy (DBT)
    c. Trauma Focused-CBT (TF-CBT)
    d. ACT

1. Often communication response is a barrier
2. Behavioral therapy with exposure may help when communication interferes with cognitive components (Hagopian & Jennett, 2016)

1. Used in combination with behavioral intervention, behavior therapy (possibly modified) may be effective for individuals with language barriers (Lange et al., 2011).

BEHAVIORAL INTERVENTIONS

Choice



Functional Communication Training (FCT): Teaching to tell us how to get their needs met - what they need - what is causing them concern

BEHAVIORAL
INTERVENTIONS

Behavioral Relaxation

Self-Management

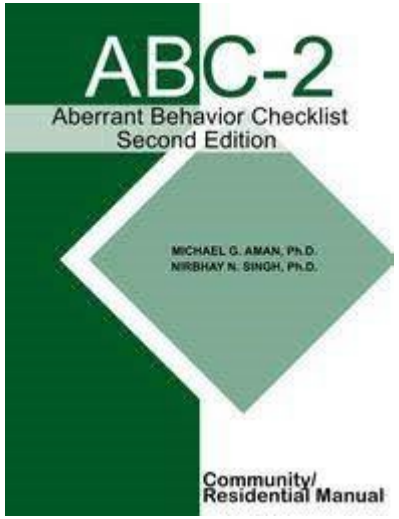
Psychopharmacological Considerations

Symptoms	Medication	Considerations	Monitoring
Core Anxiety Symptoms	Selective Serotonin Reuptake Inhibitors (SSRIs)	Titration; Behavior activation, tolerability; drug interactions; Suicidal ideation	Weekly the first 4 weeks of treatment, every 2 weeks for 1 month then monthly
Sleep Disturbance	Melatonin, Clonidine, Trazodone	Blood pressure monitoring; excess sedation	No more than 3 mg of melatonin; clonidine loses sedation effect over time
Fight or Flight Autonomic NS	Clonidine/Guanfacine (ER); Propranolol	Orthostatic hypotension; Hx of asthma?	Blood pressure monitoring
Behavioral Dysregulation	Clonidine/Guanfacine; Propranolol; Risperdal/Abilify	Orthostatic hypotension; Hx of asthma?; Metabolic considerations	Blood pressure monitoring; metabolic monitoring; weight management
Situational Anxiety: procedures, blood draws	Benzodiazepines: Lorazepam or Propranolol	Sedation; addictive; disinhibition; blood pressure	Small supply

Combined Behavioral and Pharmacological Treatment

Despite not enough research, we do know that in some cases the combination of medication and behavioral intervention (both therapy and direct intervention) can be critical

When considering medication in persons with autism and individuals with developmental disabilities, the best indirect assessment might be the Aberrant Behavior Checklist - 2



Five Subscales

1. Irritability
2. Social Withdrawal
3. Stereotypic Behavior
4. Hyperactivity/Noncompliance
5. Inappropriate Speech


BCBA CEU
Word for this
Presentation
Grapefruit
#WWHL
LIVE by Bravo

Case Example: Andrew

- 18 year old male
- Primary target behavior: Physical Aggression
  - Low Frequency, High Intensity
  - **precursor behavior - multiple questioning**
- Diagnoses:
  - ADHD, Generalized Anxiety with Obsessive Compulsive Tendencies, Conduct Disorder, Reactive Attachment Disorder, PDD, MR
- History of placements in highly restrictive programs

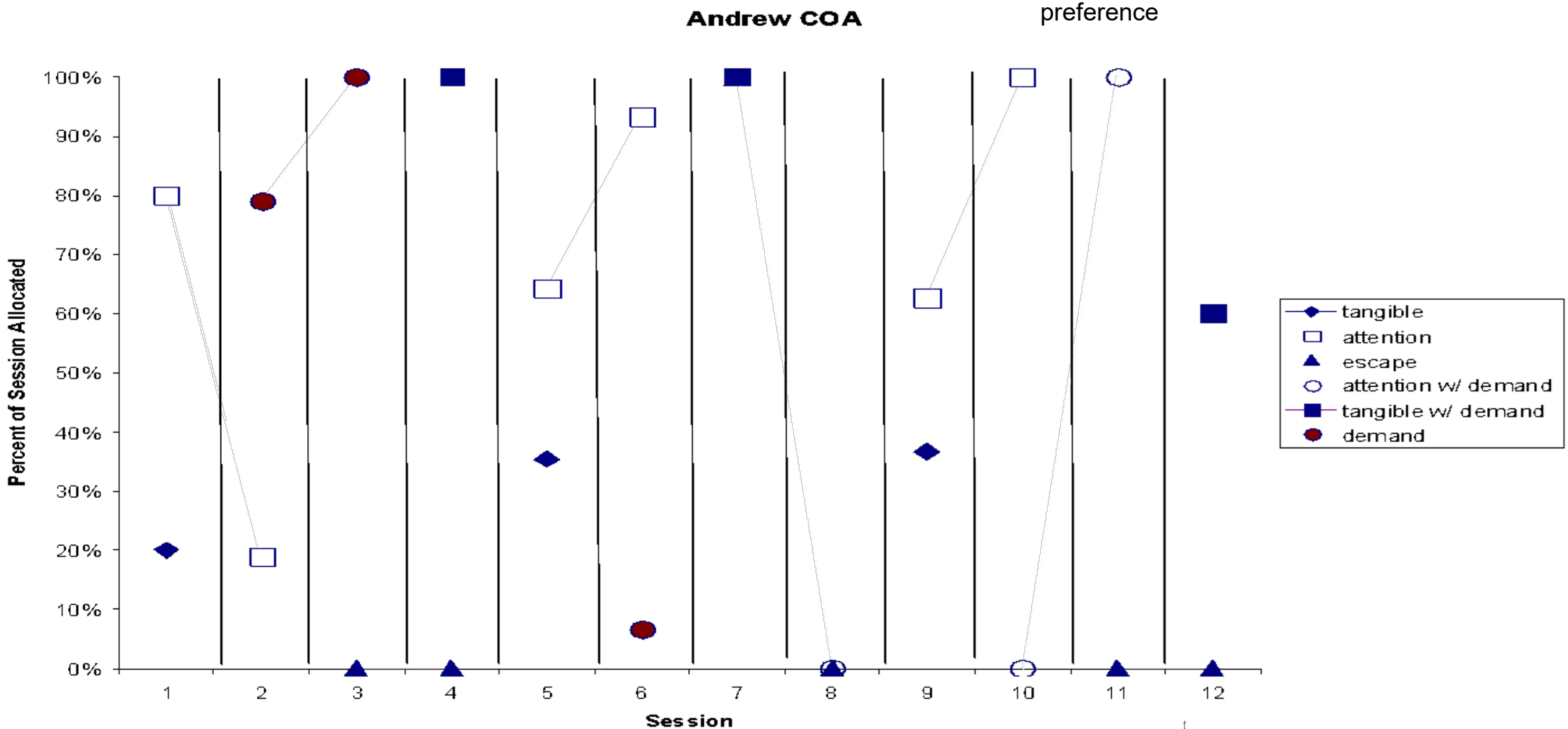
What Would You Do?

- How can you get the information you need from assessment?
- How can the interprofessional team help?

Functional Assessment and Intervention

- Results of both an FBA and functional analysis identified function of all target behavior, and multiple questioning (FA) as attention and access to tangible items/activities
- Intervention developed included social scripts, DRO/DRA, extinction
- Interventions resulted in a reduction in frequency of verbal and physical aggression
- ***Reduction was not socially significant enough due to severity of problem behavior when it occurred***
- The team thought that a concurrent operant assessment might provide some helpful information

Identified Attention as high preference



COA Results and IPT Discussion

- Results indicated both tangible and attention were high preference
- One staff member helping with the COA pointed out that during the attention condition, Andrew's conversation (repetitive) revolved around tangible items
- When given the choice between actually using the tangible item or talking about the item, he chose to talk about it.
- IPT hypothesized that anticipation of obtaining the item was more reinforcing than actually getting it **(anxiety/anticipation)**

Discussion and Questions

- Further analysis indicated significant anxiety-related behaviors when asked to choose between two highly preferred or two non-preferred activities. This led to an intervention that emphasized preference, but de-emphasized choice.
- This case example demonstrates the utility of an interprofessional approach
- The interprofessional team contributed to the discussion and opportunities for consideration of important variables that may otherwise have been missed
- Thoughts and Questions?

SUMMARY

People with IDD can and do experience anxiety (and other psychiatric) symptoms often presenting with challenging behavior

Careful assessment is required to determine the presence of symptoms, diagnosis, level of impairment and the function of the challenging behavior and its relationship with psychiatric symptoms

Treatment focused on non-pharmacological interventions supported by psychopharmacology is best. Skill building that is integrated into a kids behavioral repertoire is with them for a lifetime

Use of medication should be determined by systematic assessment in the context of and in conjunction with non-pharmacological interventions, particularly behavior analysis

The whole is greater than the sum of its parts: Interprofessionalism can be a potent vehicle for optimizing treatment outcomes for youth (all people) with ASD and co-occurring psychiatric conditions

RESOURCES

Detailed Practice Pathway
McGuire et al., 2016

TABLE 1 I/PB in ASD: Detailed Practice Pathway for Pediatric Primary Care

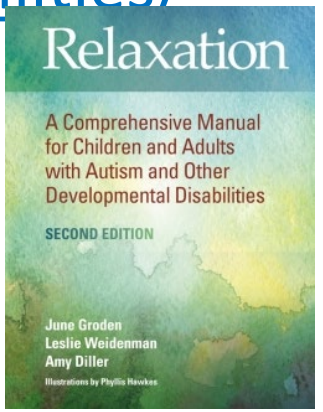
Step	Details								
1 ☐	**Assess for I/PB.**								
	Has this patient *recently* shown:			If yes, how much of a problem?			Safety risk?		
	Tantrums, meltdowns, rages?	No ☐	Yes ☐	None ☐	Mild–Moderate ☐	Severe ☐	No ☐	Yes ☐	
	Property destruction?	No ☐	Yes ☐	None ☐	Mild–Moderate ☐	Severe ☐	No ☐	Yes ☐	
	Aggression to others?	No ☐	Yes ☐	None ☐	Mild–Moderate	Severe ☐	No ☐	Yes ☐	
	Self-injury?	No ☐	Yes ☐	None ☐	Mild–Moderate	Severe ☐	No ☐	Yes ☐	

Psychiatric Symptoms and Behaviours Screen from Surrey Place: https://ddprimarycare.surreyplace.ca/tools-2/mental-health/psychiatric-symptoms-and-behaviour-screen/

Cognitive Behaviour Therapy (CBT) for People with Mild Intellectual Disability and Mood Disorders from Hassiotis and colleagues

https://www.ucl.ac.uk/psychiatry/research/epidemiology-and-applied-clinical-research-department/principal-investigators/hassiotis-0

https://grodennetwork.org/relaxation-a-comprehensive-manual-for-children-and-adults-with-autism-and-other-developmental-disabilities/



AFIRM

Autism Focused Intervention Resources & Modules

https://afirm.fpg.unc.edu/afirm-modules

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