Anxiety in Autism Spectrum Disorder: Clinical Perspectives

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Overview

• Understanding anxiety

• Anxiety prevalence and features in ASD

• Assessment of anxiety in ASD

• Treatment approaches

• Case example

• Resources
Fear Versus Anxiety
Thoughts, Feelings, and Behaviors

- **Physical feelings**
  - e.g. tummy ache, headache, heart racing

- **Behaviours**
  - e.g. finding mom, staying home from school

- **Thoughts**
  - e.g. "what if mom doesn't come home?"
Anxiety and Avoidance

(A person is confronted with an anxiety-producing situation which leads to an uncomfortable sense of worry and agitation.)

(The anxiety-producing situation is avoided, and the person receives a feeling of relief. However, next time the anxiety will be worse.)
THE COSTS OF AVOIDANCE

I. Avoidance Keeps Us Anxious

II. Avoidance Creates and Maintains Our Symptoms

III. Avoidance Disrupts Effective Behavior
Exposure

[Graph showing the relationship between exposure and anxiety over repetition/duration.]

- Anxiety peaks at moderate exposure levels and decreases as exposure increases.
- The graph illustrates that low exposure leads to low anxiety, while high exposure does not necessarily result in high anxiety, suggesting a potential plateau or decrease at higher exposure levels.]
Anxiety in Childhood

• Some anxiety is developmentally appropriate

• Anxiety becomes problematic when it is pervasive, severe, and interfering with daily functioning

• >10% of children meet criteria for an anxiety disorder

• Mixed findings of outcomes; if left untreated childhood anxiety disorders can be linked to risk for additional anxiety disorders and depression

Albano et al., 2003; Essau et al., 2013
Types of Childhood Anxiety
Anxiety in ASD

• Anxiety commonly occurs in ASD (~40-50%)

• Specific phobia, GAD, Separation Anxiety Disorder, Social Anxiety Disorder, OCD most common

• Measurement challenges – Variable findings
What does anxiety look like in ASD?

Quality

Topic
Atypical Anxiety in ASD

• Anxiety around routine, novelty, and restricted interests

• Unusual specific fears

• Social fearfullness

• Compulsive/ritualistic behavior
Correlates

• Age and gender

• IQ

• ASD Related Challenges

• Family history

• Neurobiological differences

• Temperament? – Intolerance of Uncertainty
“I can’t look at a stranger’s face and think, She’s smiling just like Amy. When Amy smiles like that she’s happy, so this person is probably happy, too. Instead, I watch and evaluate, with a slightly anxious feeling. It’s as if I have to build a behavior database for every single person I meet in life. When I encounter someone for the first time, the slate is blank and I don’t know what to expect.”

-John Elder Robison, Be Different

Bellini, 2004; White & Roberson-Nay, 2009; Kreiser & White, 2014
Assessment - Factors to Consider

• Change in functioning?

• Assess anxious behaviors
  – Clinging, avoidance/refusal, crying, facial expression, irritability, tantrums, aggression, self-injurious behavior
  – Increased repetitive behaviors/vocalizations, skin picking, perseveration

• Somatic symptoms
  – Sleep difficulties/excessive sleepiness
  – Headaches, stomach aches, muscle tension, GI symptoms

• Overlap with ASD symptoms
  – Social avoidance
  – Repetitive/ritualistic behaviors
  – Rigidity/difficulty with transitions

• Child self-report ability?

• Antecedents/consequences
  – Time of day, setting
  – Escape from non-preferred activities, access to preferred activities
Consider Situational Influences

• Consider environmental aspects that may be contributing to distress/anxiety/irritability*
  – Change in classroom/level of support
  – Increasing academic demands
  – Experiences of bullying
  – Other psychiatric problems (i.e., ADHD)
  – Illness

• Provide additional supports and monitor functioning

*In some cases anxiety may be reality based, and environmental modifications are the best form of intervention
# Functional Behavioral Assessment

## ABC Behavior Form

<table>
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<tr>
<th>DATE</th>
<th>SETTING EVENTS (events that could possibly contribute to problem behavior, even if there is extended time between event and behavior)</th>
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Treatment of Anxiety in ASD: Modified Cognitive Behavioral Therapy (CBT)

• Parent education/training
• Psychoeducation*
  – Feelings
  – Thoughts
  – Anxiety/exposure
• Development of coping strategies
• In vivo graduated exposure
• Homework practice

*Most appropriate for ages 8+ and verbal IQ ~ >80
Parental Education

• Structuring environment

• Increasing understanding of anxiety

• How to respond to anxiety/avoidance

• How to coach child to practice self-regulation strategies and face new/feared situations
Parenting a Child with ASD and Anxiety

Adaptive protection:
The child experiences situations as fearful. In many cases, these fears are realistic given the child's current skills. The parent provides appropriate protection based on the child's skill set.

The child experiences an anxiety-provoking situation.

The parent allows the child to face the fearful situation by knowing what the child can handle and when to encourage the child to face his or her fears given his or her skills.

The child faces his or her fears a little at a time when he or she is ready.

The child does not experience quite as much anxiety.

The parent gradually increases the child's exposure to the situation.

Excessive protection:
The child may have the necessary skills to handle him- or herself well in a potentially anxiety-producing situation, but the opportunity to face his or her fear is unnecessarily limited or prevented altogether. As a result, the child may continue to feel anxious in certain situations because of missed opportunities to develop coping strategies.

The parent allows the child to avoid the anxiety-provoking situation.

Child experiences an anxiety-provoking situation

Child does not practice coping skills

The parent allows the child to avoid the anxiety-provoking situation

Avoid problems & you'll never be the one who overcame them.
- Richard Bach
Examples of Environmental Structure

– Social Stories

– Visual Schedules

– Advance Warnings

– Countdown timers
Psychoeducation

• Explaining anxiety

• Creating a name for anxiety

• Identifying indicators of anxiety
  – Body feelings
  – Thoughts
  – Behaviors
Building Emotion Vocabulary

Emotions Word Search

Angry  Dislike  Excited  Happy
Sad   Scared  Shy   Sick
Surprised  Suspicious  Tired  Worried
When I feel worried or stressed, my body might show signs of worry. Here are the signs that I might feel:

- Headache
- Tears/crying
- Breathing fast
- Sweaty hands
- Stomach hurts
- Dizzy
- Heart beating fast
- Cold
- Tight neck and shoulder muscles
Measuring Anxiety

<table>
<thead>
<tr>
<th>Rating</th>
<th>What makes me feel this way?</th>
<th>How can I tell?</th>
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<tbody>
<tr>
<td>5</td>
<td>I have lost control!</td>
<td></td>
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<tr>
<td>4</td>
<td>This can really upset me</td>
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<tr>
<td>3</td>
<td>This can make me nervous</td>
<td></td>
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<tr>
<td>2</td>
<td>This bugs me</td>
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<td>1</td>
<td>This never bothers me</td>
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<thead>
<tr>
<th>What does it feel like</th>
<th>What does it look like</th>
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<tr>
<td>Out of Control</td>
<td>Felt like you’re a puppet and you’re going to explode.</td>
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<td>Yelling</td>
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<td>Crying</td>
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<td>Throwing Things</td>
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<td>Fiddling Things</td>
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<td>Breaking Things</td>
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<td>Hiding Things</td>
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<th>What does it feel like</th>
<th>What does it look like</th>
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<tr>
<td>Starting to Lose It</td>
<td>Getting angry like a Zombie.</td>
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<td>Makes me feel uncomfortable.</td>
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<td>Start to say mean or hurtful things.</td>
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<td>Call people names.</td>
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<td>Take things away from people.</td>
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<td></td>
<td>Hide things from others.</td>
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<tr>
<th>What does it feel like</th>
<th>What does it look like</th>
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<tr>
<td>Anxious/Worried/Excited</td>
<td>Feels like an Enderman and you want to get away or jump right out of your skin.</td>
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<td></td>
<td>Don’t want to talk about it.</td>
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<td>Kind of scared.</td>
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<td>Shy and afraid.</td>
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<td>Think about something.</td>
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<td>Repeating words.</td>
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<td>Can’t stay in seat.</td>
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<th>What does it feel like</th>
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<td>I think I can handle it</td>
<td>Felt like Steve who has to work hard to survive.</td>
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<td>I will try to do it.</td>
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<td>I will cooperate.</td>
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<td>I will listen.</td>
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<td>When I’m done it will make me feel good about myself for working so hard.</td>
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<th>What does it feel like</th>
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<td>Just Right</td>
<td>Happy</td>
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<td>Nothing bothers you</td>
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<td>Interested in something</td>
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Creating a Name for Anxiety
Identifying Anxious Thoughts

At the zoo one day...

I can't look at the snake! It's so scary!
I have to get out of here!
What if it escapes and comes to my house?
What if there are snakes in my backyard? I can't play ball!
A snake in a cage at the Snake House

Uh oh. It's going to get out of its cage.
I'm never going to the zoo again!
It's going to kill me! Oh no, maybe it will kill my mom!

Will thinking these thoughts make him feel better or worse?

Name: ____________

How to deal with it when I feel ____________

6. To fight the upsetting thoughts, I could have tried these thoughts instead:

   [Blank spaces for writing]
Teaching Self-Regulation

5 deep breaths

When you feel angry, take 5 deep breaths and tick each one off as you do them. This will help to calm you down.

1. STOP
2. Smell the Flower
3. Blow out the candle
4. Relax your body

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Graduated Exposure

• Creating structured opportunities to successfully face fears

• Start with a “low-medium” level fear or fear that child is ready to “fight” even if it seems artificial or small

• Start small and build up as child becomes more comfortable
Coaching Strategies

• Review the fear being faced and strategies before exposure

• Create cue cards or a cheat sheet for strategies

• Provide encouragement but do not push a child to face a fear that they are not ready to face

• Be positive and supportive; ignore excessive fear or negative behavior; remind child that they are safe – this is just their “worry”

• Set a specific time allotment for exposure or remain in situation until child’s fear decreases

• Assess child’s anxiety level at pre-set intervals

• End with success
Example Exposure Hierarchies

Fear of being corrected:
  Corrected by mother without warning

  Corrected by mother while playing a game with warning

  Watch another child be corrected

  Watch movie clip of child being corrected

  Watch funny movie clip of dog being corrected
Fear of Car Alarms:
Walk near cars without knowing whether alarm will be activated

Walk near cars; knowing that alarm will be activated

Slowly approach car alarm going off

Watch another person walk near car alarm from distance

Watch video of car alarm

Listen to recording of car alarm – louder volume

Listen to recording of car alarm – soft volume

Look at picture of car alarm
Incorporating Rewards

• Explicitly praise “brave behavior” during exposures and real life
• Praise practice of coping strategies when calm first
• Simple sticker or tracking charts
• Decide upon specific rewards for practice
Modifications for Children with Less Language or Cognitive Challenges

• Reduce/simplify psychoeducation
  – Remove education about thoughts (or provide/model helpful thoughts at child’s language level)
  – Use simple language – scary vs. safe

• Use simple self-regulation strategies

• Model exposures (with visual aids, toys, video, or real life demonstration)

• Graduated structured practice with positive reinforcement for “brave” behavior

• Planned ignoring of excessive anxiety
End Goal

- Child may still exhibit anxiety/dislike of certain situations
- Child may feel anxious, but avoidance does not interfere with functioning
- Parent and child have skills to face new anxiety provoking situations
Case Example – Fear of Making Mistakes

• 9 year old boy with ASD and high average intelligence

• Presenting concerns:
  – Excessive anxiety/avoidance related to homework
  – Extreme distress related to taking tests
  – Worry about germs and compulsion
  – Resistance to leaving house

• Family with mother, father, and younger sister; grandmother assisted with care
Assessment of Anxiety

• Defining homework related behaviors
  – Worry/apprehension about starting homework
  – Extreme distress when he did not know answer
  – Excessive erasing
  – Worry about amount of time homework would take during homework time
  – Resistance to ending homework time
  – Preoccupation about amount of time “lost” for playing video games
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Antecedents

• Structuring of environment
  – Communication with teacher
  – Reduction in assignment load
  – Set time for homework completion
  – Limiting of extremely “high reward” video games during homework nights

• Teaching
  – Mistakes
  – Asking for help
  – Time management strategies during tests/homework
Exposures

• Make a small mistake on homework and turn it in
• Write a sentence with 1 mistake
• Write a sentence and erase 1 time
• Make a mistake when drawing a cartoon and don’t erase
• Only erase up to 5 times during homework
• Write as quickly as possible for 30 seconds+
• Make a mistake spelling name on homework and turn it in
• Make extra marks on “practice” test
• Make extra marks on homework paper
• Draw as quickly as possible without erasing during “Pictionary”
• Watch psychologist/mother make mistakes
• Watch videos of people making mistakes
Outcome

- Decreased time spent on homework
- Increased compliance with initiating homework
- Decreased distress and erasing during homework
- Increased writing speed noted in OT
- Improved test performance
- Increased readiness to work on addressing symptoms of OCD related to germs
Why Target Anxiety in ASD
Resources
Books for Children

- The Girl Who Never Made Mistakes
- Wilma Jean the Worry Machine
- Beautiful Oops!
- When My Autism Gets Too Big!
- Up and Down the Worry Hill
Register Now!

2016 IMFAR Preconference Workshop Sponsored by the Center for Autism and Related Disorders

Date: May 11, 2016
8 a.m. – 4 p.m.

Location: Towson University
West Village Commons

Featuring Four Participant Tracks:
• Behavior Techniques
• Delivering Autism Services
• Medical Research and Practice
• Technology & Application

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Save the Date

16th Annual CARD Autism Conference: A World of Opportunities

October 13 – 14, 2016 at the Radisson Hotel North Baltimore

This annual conference is the premier educational autism event in the region and addresses a wide range of topics across the lifespan, featuring more than a dozen workshops and speakers on topics of importance to the autism community.

AutismConference.KennedyKrieger.org