Conceptualizing

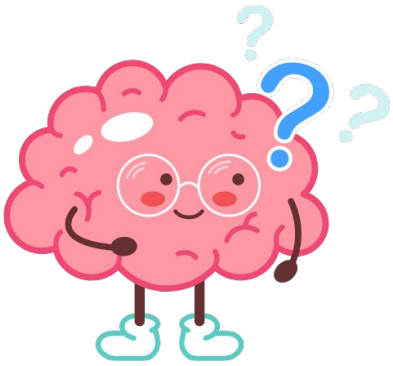
Autism & Anxiety

Maya Matheis, PhD, MSW

A little about me…

- Clinical psychologist in private practice
- Faculty at UH Mānoa's Center on Disability Studies
- Pre- and post-doctoral training at the UC Davis MIND Institute
- Clinical specialization: assessment of neurodevelopmental disorders and support for neurodiverse individuals across the lifespan and their families
- Research specialization: mental health support for autistic individuals; community implementation of ASD interventions

Today's Agenda



- Conceptualizing anxiety & autism
- Myth busting
- Support and treatment recommendations
- Medical and social models of disability
- Resources
- Q&A

Conceptualizing Anxiety & ASD

Autism Spectrum Disorder

- Neurodevelopmental Condition: Affects how individuals communicate, interact socially, and process information.
- Core Characteristics
  - Differences in social communication and interaction.
  - Repetitive behaviors, restricted interests, and sensory sensitivities.
- Lifelong Condition: Present from early childhood, though manifestations can change over time.
- Prevalence: Affects approximately 1 in 36 children in the U.S. (CDC, 2023).

DSM-5 ASD Diagnostic Criteria

Social communication and social interaction

Autism Spectrum Disorder (ASD)

Domain A:

(all three, currently or by history)

1. Deficits in social communication and interaction
2. Deficits in nonverbal communicative behaviors
3. Deficits in developing, maintaining, and understanding relationships

DSM-5 ASD Diagnostic Criteria

Social communication and social interaction

Autism Spectrum Disorder (ASD)

Domain A:

1. Deficits in social communication and interaction

Examples:

- *Abnormal social approach*
- *Lack of back-and-forth conversations*
- *Reduced sharing of interests*
- *Reduced sharing of emotions/affect*
- *Lack of initiation of social interaction*
- *Poor social imitation*

DSM-5 ASD Diagnostic Criteria

Social communication and social interaction

Autism Spectrum Disorder (ASD)

Domain A:

2. Deficits in nonverbal communicative behaviors

Examples:

- *Abnormal social use of eye contact*
- *Impairments in use/understanding of body postures and gestures*
- *Abnormal volume, pitch, intonation, rate, rhythm, stress, or prosody in speech*
- *Lack of coordinated verbal and nonverbal behavior*
- *Lack of coordinated non-verbal behavior*

DSM-5 ASD Diagnostic Criteria

Social communication and social interaction

Autism Spectrum Disorder (ASD)

Domain A:

3. Deficits in developing, maintaining, and understanding relationships

Examples:

- *Deficits developing and maintaining relationships*
- *Difficulties adjusting behavior to suit social context*
- *Difficulties in sharing imaginative play*
- *Difficulties in making friends*
- *Absence of interest in others*

DSM-5 ASD Diagnostic Criteria

Restricted, repetitive patterns of behavior, interests, or activities

Autism Spectrum Disorder (ASD)

Domain B:

(at least two, currently or by history)

1. Stereotyped or repetitive motor movements, use of objects, or speech
2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal nonverbal behavior
3. Highly restricted, fixated interests that are abnormal in intensity or focus
4. Hyper- or hypo-reactivity to sensory input or unusual interests in sensory aspects of the environment

DSM-5 ASD Diagnostic Criteria

Restricted, repetitive patterns of behavior, interests, or activities

Autism Spectrum Disorder (ASD)

Domain B:

1. Stereotyped or repetitive motor movements, use of objects, or speech

Examples:

- *Stereotyped or repetitive speech*
- *Stereotyped or repetitive motor movements*
- *Stereotyped or repetitive use of objects*

DSM-5 ASD Diagnostic Criteria

Restricted, repetitive patterns of behavior, interests, or activities

Autism Spectrum Disorder (ASD)

Domain B:

2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal nonverbal behavior

Examples:

- *Adherence to routine*
- *Ritualized patterns of verbal and nonverbal behavior*
- *Excessive resistance to change*
- *Rigid thinking*

DSM-5 ASD Diagnostic Criteria

Restricted, repetitive patterns of behavior, interests, or activities

Autism Spectrum Disorder (ASD)

Domain B:

3. Highly restricted, fixated interests that are abnormal in intensity or focus

Examples:

- *Preoccupations; obsessions*
- *Narrow range of interests*
- *Being overly perfectionistic*
- *Attachment to unusual inanimate object (e.g., string, rubber band)*
- *Unusual fears*
- *Preoccupation with numbers, letters, etc.*

DSM-5 ASD Diagnostic Criteria

Restricted, repetitive patterns of behavior, interests, or activities

Autism Spectrum Disorder (ASD)

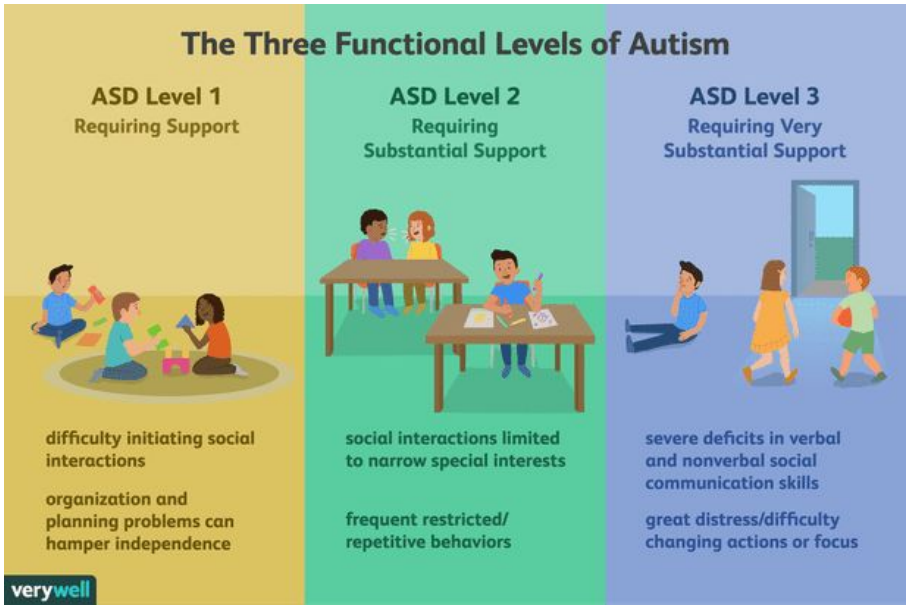
Domain B:

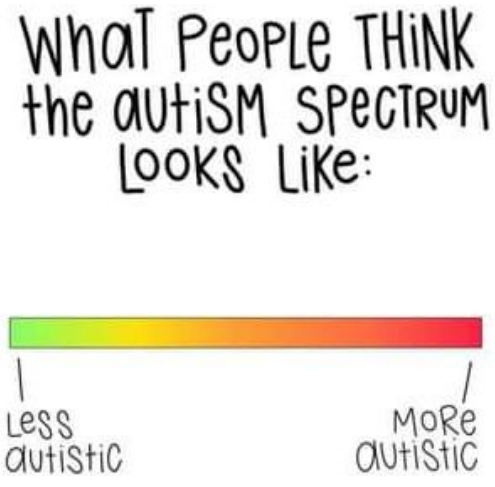
4. Hyper- or hypo-reactivity to sensory input or unusual interests in sensory aspects of the environment

Examples:

- *High pain tolerance*
- *Preoccupation with texture or touch*
- *Unusual visual exploration*
- *Odd responses to sensory input*
- *Unusual sensory exploration (sound, smell, taste, vestibular)*

DSM-5 ASD Functioning Levels





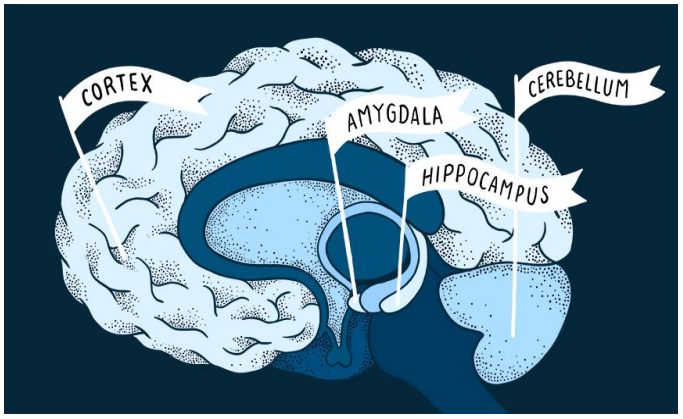
Myth Busting

Myth: Anxiety only occurs in individuals with autism who are “high-functioning”

Reality: Anxiety can affect autistic individuals across the spectrum, not just those labeled as "high-functioning." This label can minimize the experience of anxiety and ignore the need for support in those who may be perceived as more "capable."

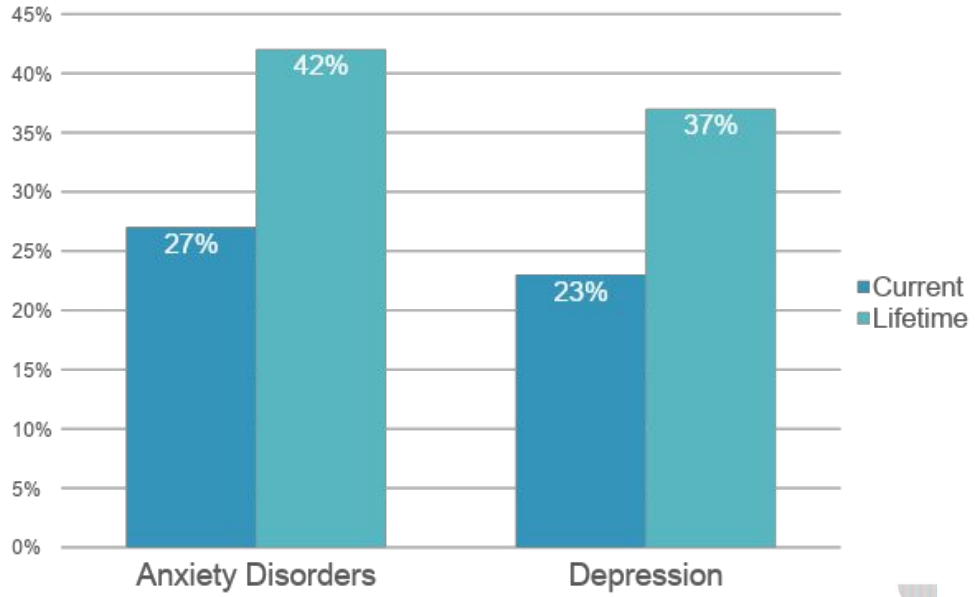
Neurobiology of autism

- Neurodevelopmental
- Heterogenous
- Brain structure differences
- Brain development differences
- Brain connection differences



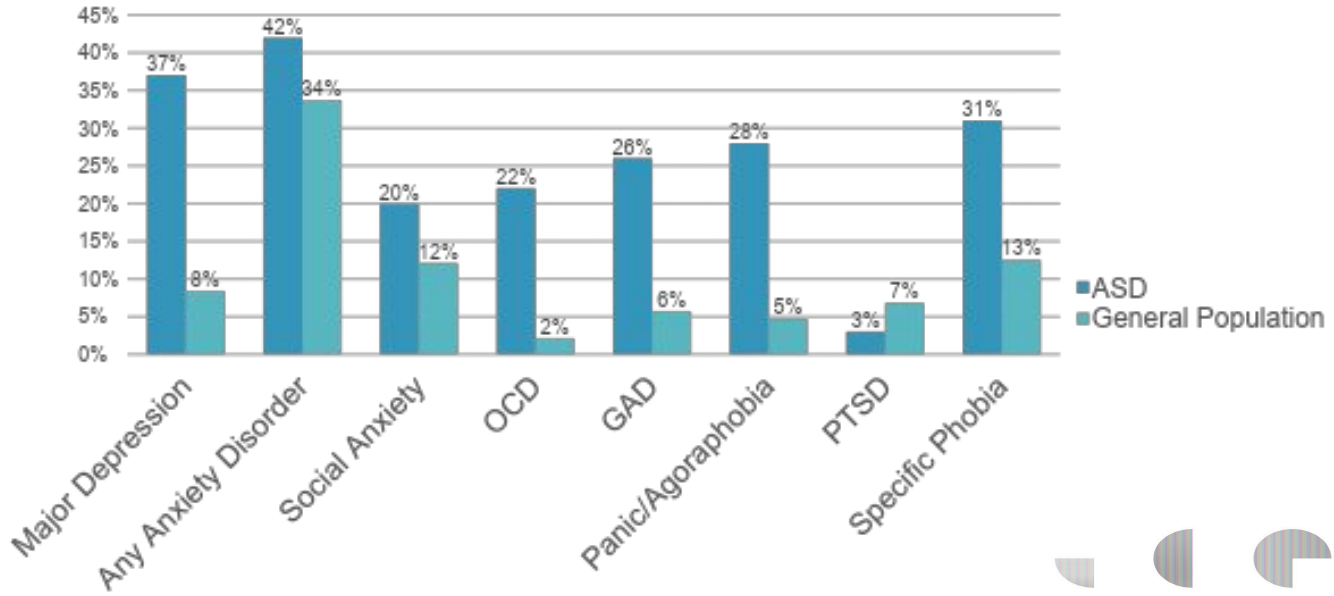
Prevalence of Anxiety Disorders and Depression in Autistic Adults

Hollocks et al., 2019



Compared to General Population

Hollocks et al., 2019, NIMH



Myth Busting

Myth: Anxiety is a core feature of autism.

Reality: While anxiety frequently co-occurs with autism, it is not a defining characteristic of autism itself. Anxiety frequently co-occurs, but it is not inherently part of the autism diagnosis.

Anxiety in ASD (Vasa et al., 2020)

- Anxiety disorders are the most prevalent (~40%) and impairing co-occurring conditions associated with ASD
- Some features similar to general population, but some variations in presentation
- Research shows that anxiety symptoms in individuals with ASD worsen with age and have a significant negative impact on all domains of functioning
- Pressing need to improve anxiety detection and treatment for autistic individuals

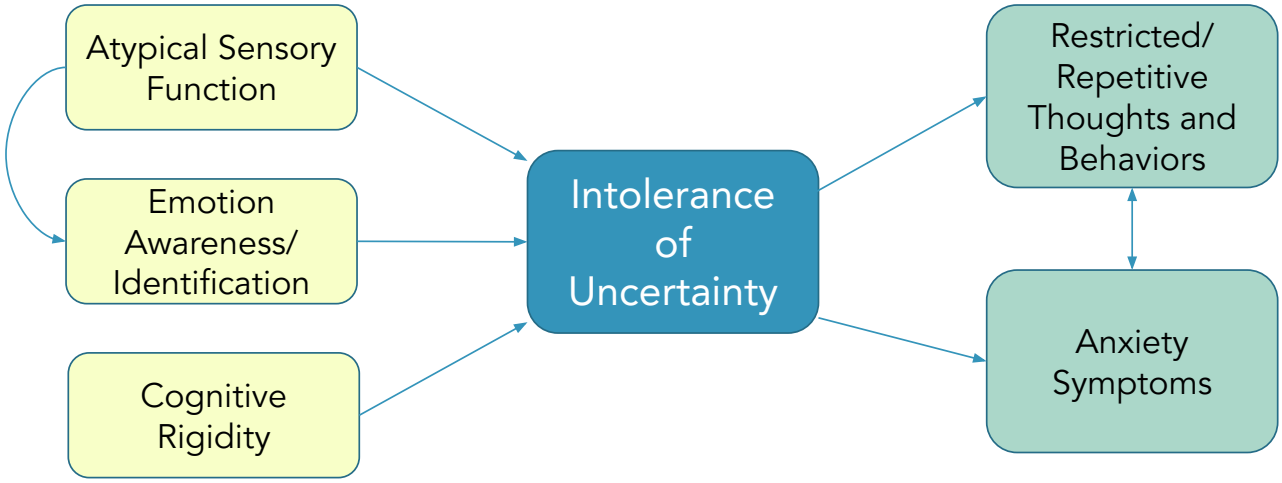
Co-occurring Prevalence Rates w/ASD

- Social anxiety disorder: ~40% (Spain et al., 2018)
- Specific phobia: ~30% (Postorino et al., 2017)
- Generalized anxiety disorder: ~35% (Zaboski & Storch, 2018)
- Obsessive compulsive disorder: ~17% (Postorino et al., 2017)

Intolerance of Uncertainty

- Autistic children and adults report high rates of IU (Jenkinson et al., 2020)
- Recent meta-analysis found sig. correlation between anxiety and IU in children and adults with ASD IU (Jenkinson et al., 2020)
  - Large effect size, $r = 0.62$, 95% confidence interval = [0.52, 0.71], $p < 0.001$
  - Comparable to neurotypical population
- IU is theorized to be an important mediator for anxiety in ASD (South & Rogers, 2017)

Intolerance of Uncertainty (South & Rogers, 2017)



Myth Busting

Myth: Social anxiety and autism are the same

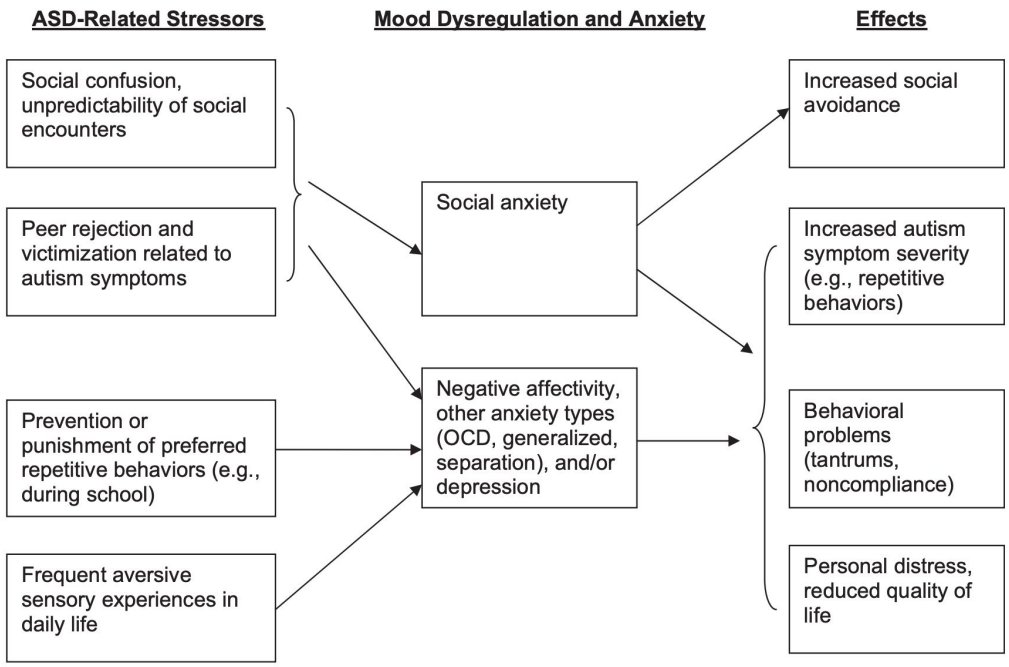
Reality: While both autism and social anxiety can involve difficulties in social situations, their roots are different. Social anxiety involves a fear of judgment or negative evaluation by others, while social difficulties in autism are often related to differences in social communication and sensory processing.

Social Anxiety and ASD (Spain et al., 2018)

- Social skill impairments may contribute to and exacerbate SA symptoms
- SA related to low self-perception of social competence
- Individuals with ASD & SA have poorer social functioning than those with ASD w/o SA

Hypothetical Model of Anxiety in ASD

(Wood & Gaddow, 2010)



Social Anxiety Disorder (Kerns et al., 2016)

Performance vs. Skill Deficit

SA

- Social impairments are present in certain situations but not others (with family vs. with peers)
- Marked improvement in social communication with increased rapport
- Performance deficit, not skill deficit

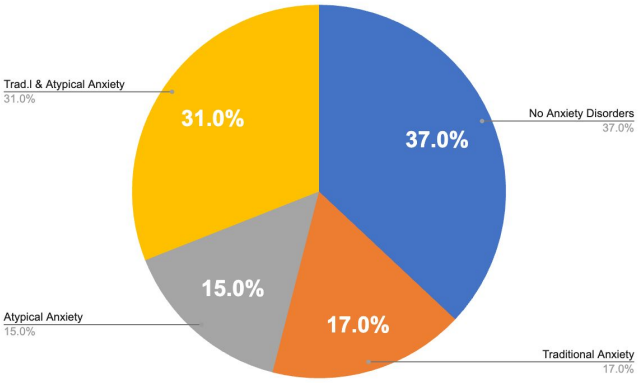
ASD & SA

- Some improvement in social impairments with change in context or improvement in rapport, but impairments still present and observable
- Reduced social motivation
- Skill and performance deficit

ASD

- More subtle improvements in social impairments with change in context or with specific people
- Reduced social motivation
- Skill deficit

Typical & Atypical Anxiety in ASD (Kerns et al., 2014)



- Ages 7-17, N=59, IQ >60
- 48% had traditional anxiety disorders
  - *Predictors:* stronger language abilities, anxious cognitive style, sensory hypersensitivity
- 46% had atypical anxiety:
  - *Examples:* fear of change, social fearfulness, unusual specific fears, anxiety around routines/RRBs
  - *Predictors:* greater ASD severity, anxious cognitive style
- IQ was NOT a predictor

Differential Diagnosis

Diagnostic Framework for Anxiety/ASD

(Kerns et al., 2016)

1. Determine if anxiety symptoms are causing difficulties and are above the individual's developmental level.
2. Determine if anxiety symptoms are causing significant impairment.
3. Distinguish the anxiety symptoms from difficulties in emotional regulation and sensory sensitivities.
4. Determine whether the anxiety symptoms are beyond what is characteristic of ASD.

Other Specified Anxiety Disorder- Social Anxiety without Fear of Social Evaluation

(Kerns et al., 2016)

- Individuals with ASD may experience anxiety related to social situations w/o the fear of negative evaluation characteristic of SA
- Consider this dx when:
  - Many behavioral manifestations and worries about social situations
  - Worries are excessive compared to individual's social skill impairments and relative to others with ASD

Separation Anxiety Disorder (Kerns et al., 2016)

Cause of distress and anticipation of separation.

SAD	ASD & SAD	ASD
• Worry excessive for developmental level	• Worry excessive for developmental level	• Worry may be appropriate for developmental level
• Anticipatory symptoms as well as distress	• Anticipatory symptoms and distress	• Lack of anticipatory symptoms
• Worry and fear associated with separation from attachment figure and/or home	• Worry and fear associated with separation from attachment figure and/or home	• Distress associated with ASD-related challenges (e.g., disruption in routine)

Generalized Anxiety Disorder (Kerns et al., 2016)

Focus of anxiety/perseveration

GAD

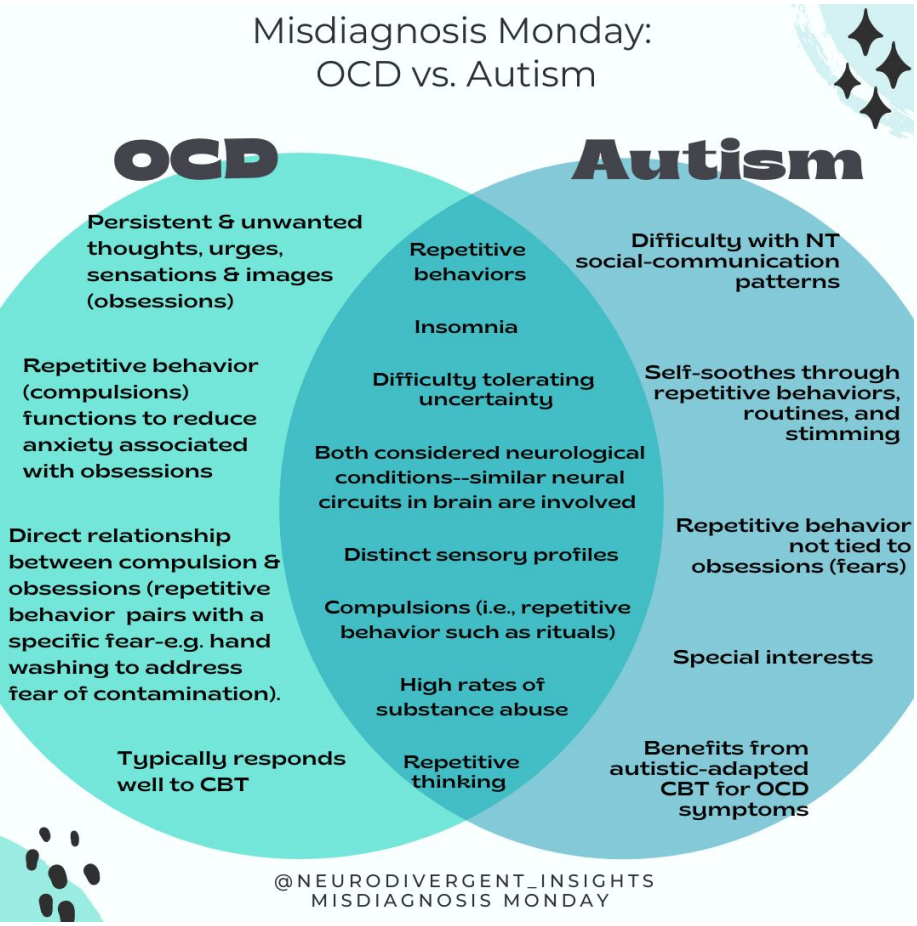
- Excessive anxiety and worry, more days than not, across a variety of domains
- Worries are interfering and can cause physical symptoms, distraction, irritability and sleep difficulties
- Worries are difficult to control and cause distress

ASD & GAD

- Worries cover a wide array of domains, not just ASD-related challenges or skill deficits
- Perseverative thought patterns and/or ruminative thinking cause distress and are difficult to control

ASD

- May have perseverative thought patterns and/or ruminative thinking related to special interests, ASD-related challenges (e.g., change in routine) or skill deficits.



OCD & ASD

Comparison of features

Repetitive Behaviors in OCD vs. ASD

(Postorino et al., 2017)

OCD

- Function is directly and consciously tied to an obsession/fear (to stop bad things from happening)
- Usually are annoying and stressful to the individual
- Would rather not do them but feels compelled
- Likely to experience sensory hypersensitivity

ASD

- Function is self-soothing or internally-driven
- Usually enjoyable to the individual
- Does not cause stress
- Would rather do them
- Likely to experience both hyper- and hyposensitivity to sensory input

Specific Phobias (Kerns et al., 2016)

- Intense fear and anxiety around specific objects or situations
- Very common in ASD but underdiagnosed
- Content is often idiosyncratic & potential of threat may not be apparent to other people
- Sensory hypersensitivity may be related to a specific phobia
  - If fear results in anticipatory worry and avoidance, then may warrant a specific phobia dx

Assessment Considerations

Multi-Informant and Multi-Method Assessment of Anxiety (Vasa et al., 2016)

- Best practice to use a combination of:
  - Clinical interviews and rating scales
  - Multi-informants (e.g., child, parent, and teachers)
  - Behavioral observations
- Very few tools validated for assessing anxiety in autistic individuals. Use tools for TD children/adults but be aware of limitations and interpret cautiously.

Clinical Interviews

- Probe for idiosyncratic fears and worries
- Probe for behavioral signs of anxiety
  - Crying and avoiding, increase in RRBs in specific contexts, tantrums, sleep difficulties, aggression, self-injury, irritability, hair-pulling, skin-picking
- Self-report
  - Assess individual's ability to understand and report emotions
  - Use simple "Yes-No" questions with individuals with expressive language difficulties

Informant- & Self-Report Measures

- Endorsement of social anxiety sx very common in self-report and parent-report measures for clients with ASD (Spain et al., 2018)
- Teachers often under-report anxiety sx in children with ASD (Vasa et al., 2020)
- Very common for there to be disagreement between parent- and child-ratings
  - Consider child's level of insight into emotions

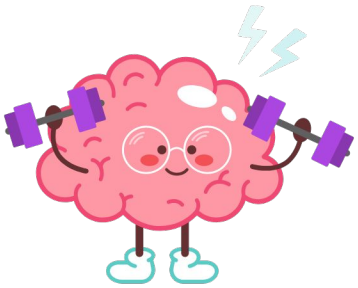
Behavioral Observations

- Quality of social communication over the course of observation(s)
- Avoidance and fearful behavior
  - Freezing bx, fearful affect, clinginess, crying, increased RRBs and/or vocalizations
  - Consider carefully the function of such behavior (Avoidance of the anxiety trigger? Or avoidance of the assessment?)

Support and Treatment

How much of "this" is autism?

- Does the answer matter for treatment?
- Holistic understanding of the individual
- Develop treatment goals that address the needs of the client



Myth Busting

Myth: Autistic individuals cannot benefit from counseling or therapeutic interventions for therapy.

Reality: Many evidence-based interventions for anxiety have been shown to be effective for autistic children and adults. However, some modifications may be needed to address sensory sensitivities, communication differences, and the need for more structured, concrete approaches.

Evidence-Based Intervention

- Cognitive behavioral therapy (CBT) is effective for reducing anxiety symptoms for autistic children and adults (Cooper et al., 2018; Spain et al., 2015)
- Therapist confidence is one of the main barriers, followed by lack of willingness (Adams & Young, 2020; Cooper et al., 2018; Maddox et al., 2019)
  - Very few receive training on working with this population
  - Myth that individuals with ASD need specialized care

General Adaptations to Psychotherapy

Cooper et al., 2018

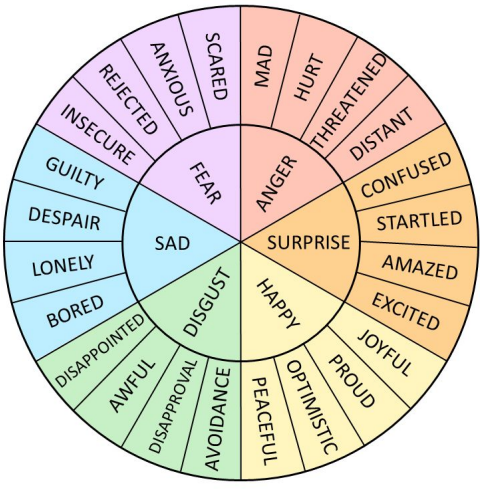
- More emphasis on behavioral strategies
- Concrete and structured approach
- Psychoeducation about emotions and social skills
- More visual aids
- Discussion of special interests in therapy
- Involving family members or partner

Clinical Recommendations

- Develop shared vocabulary to talk about feelings and emotions
- Avoid metaphors
- Be direct and provide frequent feedback
- Think about gaps in skills and self/social awareness
- Practice skills during sessions
  - Video feedback and role-plays

Back to Basics

- Identifying emotions
- Processing emotions
- Basic coping strategies
- Social cues
- Social scripts
- Social expectations



Psychopharmacology

- Selective serotonin reuptake inhibitors (SSRIs) can be effective in reducing anxiety symptoms for individuals with ASD (Vasa et al., 2014; Vasa et al., 2016)
- Recommended as part of a comprehensive treatment plan
- Combining medication with therapy may enhance treatment outcomes for anxiety in individuals with autism (Elvins & Green, 2010).

Lifestyle Adjustments

- Physical activity protects against onset/aggravation of anxiety (Schuch et al., 2019)
- Dietary habits: nutritious diet associated with lower anxiety levels (Saifullah et al., 2016)
- Sleep hygiene: inadequate sleep aggravates anxiety (Hoying et al., 2020)

Medical & Social Models of Disability

Models of Disability

Medical Model

- Focus on the biological aspects of disability in the individual that are different than "typical" functioning.
- Emphasis on *fixing* or *improving* an internal aspect of the individual.
- *Keywords*: cure, treatment, intervention, therapy, deficits, impairments

Social Model

- Focus on the barriers to fully participate in home and community life. Disability viewed as restrictions imposed by society.
- Emphasis on changing and adjusting the physical and social environments to enhance and promote inclusive functioning.
- *Keywords:* support, accomodation, attitudes, stigma, universal design

Example with Mobility-Related Disability

Medical Model

- Surgery
- Medications
- Physical therapy
- Strength-training
- Acupuncture
- Etc.

Social Model

- Wheelchair/mobility assistance device meeting individual needs and abilities
- Accessible housing (ramp, counters, bathroom, etc.)
- Accessible transportation
- Accessible neighborhood and community
- Stigma and discrimination

Models of Disability: Autism/Anxiety

Medical Model

- Autism and anxiety are medical conditions with neurophysiological and genetic bases that cause impairments in an individual's functioning.

Social Model

- Individuals who have autism and anxiety have functional limitations due to environmental and social barriers.

Towards a Holistic Model…

Minority Stress Theory

- Individuals from marginalized groups experience unique stressors related to their social identities, such as discrimination, prejudice, and internalized stigma (Frost & Meyer, 2023)
  - Compounded by societal discrimination, which can manifest in various forms, including verbal harassment, social exclusion, and systemic inequalities in healthcare access
- Individuals navigating multiple marginalized identities may encounter unique stressors that heighten their vulnerability to mental health issues (Jackson et al., 2016)

Research Support

- Isolation and lack of support can exacerbate feelings of anxiety and depression (Bowling et al., 2020)
- Community belongingness can serve as a protective factor against the negative mental health outcomes associated with enacted stigma (Veale et al., 2017).
- Amongst autistic adults, everyday discrimination, internalized stigma, and concealment significantly predict poorer mental health, despite controlling for general stress exposure (Botha & Frost, 2022)

For Autistic Individuals…

- Youth with ASD are at a considerably higher risk of being bullied compared to their neurotypical peers, which is a risk-factor for depression and anxiety (Gutiérrez & Olivar, 2015; Maïano et al., 2015)
- Discrimination in educational and workplace settings very common for autistic youth and adults (Dillenburger et al., 2015)
- Autistic adults are much more likely to be unemployed despite higher education attainment (Schwartzman, J.M., Corbett, 2024)

Medical Model

Treatment

- Psychopharmaceuticals (medication)
- Cognitive behavior therapy
- Mindfulness and relaxation strategies
- Exposure-based therapies
- Complementary/alternative medicine (e.g., acupuncture, herbs, melatonin)

Compensatory Capacity Building

- Coping skills
- Social-communication skills

Lifestyle Adjustments

- Physical activity
- Sleep hygiene
- Diet and nutrition

Social Model

Supports

- School/workplace accommodations
  - Access to quiet, calming space
  - Access to sensory input (e.g., movement, fidgets, soft textures)
  - Use of tools to reduce sensory input (e.g., noise canceling headphones)
  - Advance notice of schedule changes
  - Support with transitions
  - Visual supports

Physical Environment

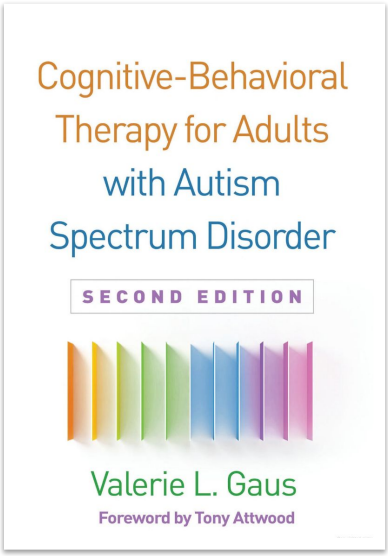
- Sensory-friendly (e.g. reduced stimulation)
- Multiple modes of communication

Social Environment

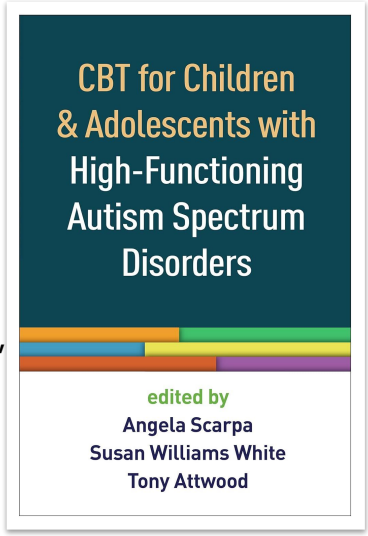
- Acceptance of neurodevelopmental differences
  - Reduce stigma and judgement
  - No punishment for alternative methods of communication, movement, etc.
  - Promote inclusive practices and awareness
  - Anti-bullying policies

Resources

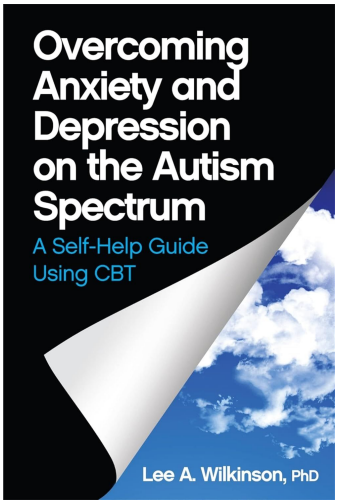
Recommended Clinician Resources



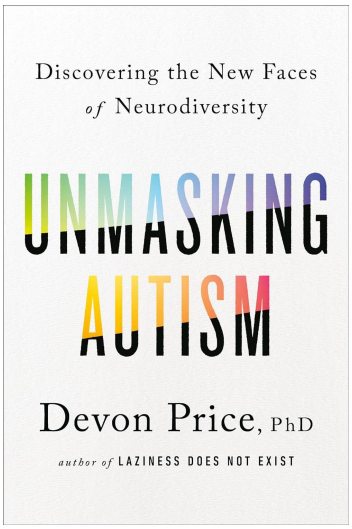
- Book: Cognitive Behavioral Therapy for Adults with Autism Spectrum Disorder, Gau
- Book: CBT for Children and Adolescents with High-Functioning Autism Spectrum Disorders, Scarpa, White & Attwood
- Article: Cooper, K., Loades, M. E., & Russell, A. (2018). Adapting psychological therapies for autism. *Research in autism spectrum disorders*, 45, 43-50.



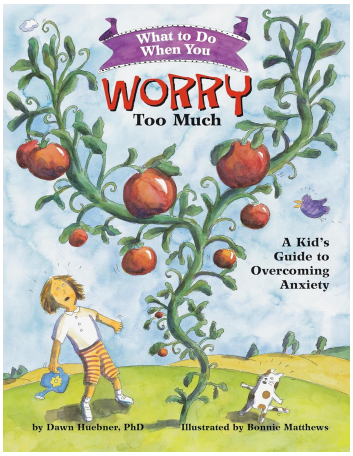
Recommended Adult Resources



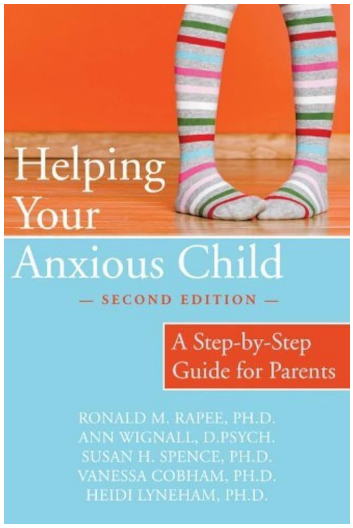
- Adult Workbook: Overcoming Anxiety and Depression on the Autism Spectrum: A Self-help Guide Using CBT
- Book: Unmasking Autism: Discovering the New Faces of Neurodiversity, Devon Price, PhD



Recommended Child Resources

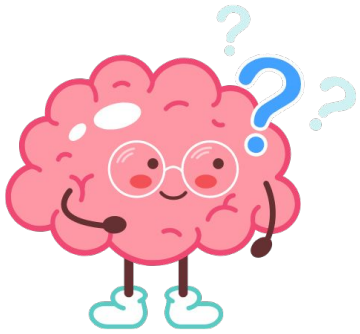


- Workbook: What to Do When You Worry Too Much, A Kid's Guide to Overcoming Anxiety
- Book: Helping Your Anxious Child: A Step-by-Step Guide for Parents, Rapee, Wignall & Spence



References

- Botha, M., & Frost, D. M. (2020). Extending the minority stress model to understand mental health problems experienced by the autistic population. Society and mental health, 10(1), 20-34. https://doi.org/10.1177/215686931880429
- Elvins, R. and Green, J. (2010). Pharmacological management of core and comorbid symptoms in autism-spectrum disorder. Advances in Psychiatric Treatment, 16(5), 349-360. https://doi.org/10.1192/apt.bp.108.005538
- Jenkinson, R., Milne, E., & Thompson, A. (2020). The relationship between intolerance of uncertainty and anxiety in autism: A systematic literature review and meta-analysis. *Autism*, *24*(8), 1933–1944. https://doi.org/10.1177/1362361320932437
- Kerns, C. M., Kendall, P. C., Berry, L., Souders, M. C., Franklin, M. E., Schultz, R. T., Miller, J., & Herrington, J. (2014). Traditional and atypical presentations of anxiety in youth with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *44*(11), 2851–2861. https://doi.org/10.1007/s10803-014-2141-7
- Kerns, C. M., Rump, K., Worley, J., Kratz, H., McVey, A., Herrington, J., & Miller, J. (2016). The differential diagnosis of anxiety disorders in cognitively-able youth with autism. *Cognitive and Behavioral Practice*, *23*(4), 530–547. https://doi.org/10.1016/j.cbpra.2015.11.004
- Hoying, J., Melnyk, B. M., Hutson, E., & Tan, A. (2020). Prevalence and correlates of depression, anxiety, stress, healthy beliefs, and lifestyle behaviors in first-year graduate health sciences students. Worldviews on Evidence-Based Nursing, 17(1), 49-59. https://doi.org/10.1111/wvn.12415
- Postorino, V., Kerns, C. M., Vivanti, G., Bradshaw, J., Siracusano, M., & Mazzone, L. (2017). Anxiety disorders and obsessive-compulsive disorder in individuals with autism spectrum disorder. *Current Psychiatry Reports*, *19*(12), 92. https://doi.org/10.1007/s11920-017-0846-y
- Saifullah, K., Cm, W., & Reynolds, S. (2016). Is there an association between diet and depression in children and adolescents? a systematic review. British Journal of Nutrition, 116(12), 2097-2108. https://doi.org/10.1017/s0007114516004359
- Schuch, F. B., Stubbs, B., Meyer, J. D., Heißel, A., Zech, P., Vancampfort, D., … & Hiles, S. A. (2019). Physical activity protects from incident anxiety: a meta-analysis of prospective cohort studies. Depression and Anxiety, 36(9), 846-858. https://doi.org/10.1002/da.22915
- Schwartzman, J.M., Corbett, B.A. Depression and Employment Outcomes in Autistic Adults: A Systematic Review. Rev J Autism Dev Disord 11, 157–171 (2024). https://doi.org/10.1007/s40489-022-00331-9
- Spain, D., Sin, J., Linder, K. B., McMahon, J., & Happé, F. (2018). Social anxiety in autism spectrum disorder: A systematic review. *Research in Autism Spectrum Disorders*, *52*, 51–68. https://doi.org/10.1016/j.rasd.2018.04.007
- South, M., & Rodgers, J. (2017). Sensory, emotional and cognitive contributions to anxiety in autism spectrum disorders. *Frontiers in Human Neuroscience*, *11*. https://doi.org/10.3389/fnhum.2017.00020
- Vasa, R., Carroll, L., Nozzolillo, A., Mahajan, R., Mazurek, M., Bennett, A., … & Bernal, M. (2014). A systematic review of treatments for anxiety in youth with autism spectrum disorders. Journal of Autism and Developmental Disorders, 44(12), 3215-3229. https://doi.org/10.1007/s10803-014-2184-9
- Vasa, R. A., Mazurek, M. O., Mahajan, R., Bennett, A. E., Bernal, M. P., Nozzolillo, A. A., Arnold, L. E., & Coury, D. L. (2016). Assessment and treatment of anxiety in youth with autism spectrum disorders. *Pediatrics*, *137*(Supplement_2), S115–S123. https://doi.org/10.1542/peds.2015-2851J
- Vasa, R. A., Keefer, A., McDonald, R. G., Hunsche, M. C., & Kerns, C. M. (2020). A scoping review of anxiety in young children with autism spectrum disorder. *Autism Research*, *13*(12), 2038–2057. https://doi.org/10.1002/aur.2395
- Wood, J. J., & Gadow, K. D. (2010). Exploring the nature and function of anxiety in youth with autism spectrum disorders. *Clinical Psychology: Science and Practice*, *17*(4), 281–292. https://doi.org/10.1111/j.1468-2850.2010.01220.x
- Zaboski, B. A., & Storch, E. A. (2018). Comorbid autism spectrum disorder and anxiety disorders: A brief review. *Future Neurology*, *13*(1), 31–37. https://doi.org/10.2217/fnl-2017-0030

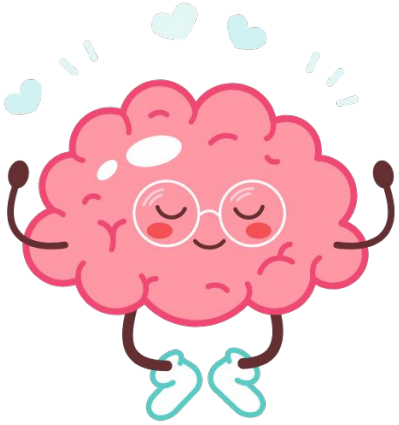


Q&A

Mahalo!

- mmatheis@hawaii.edu
- drmayapsychology.com

DR. MAYA
Assessment • Therapy • Consultation



Download Slides

https://go.hawaii.edu/Lca