



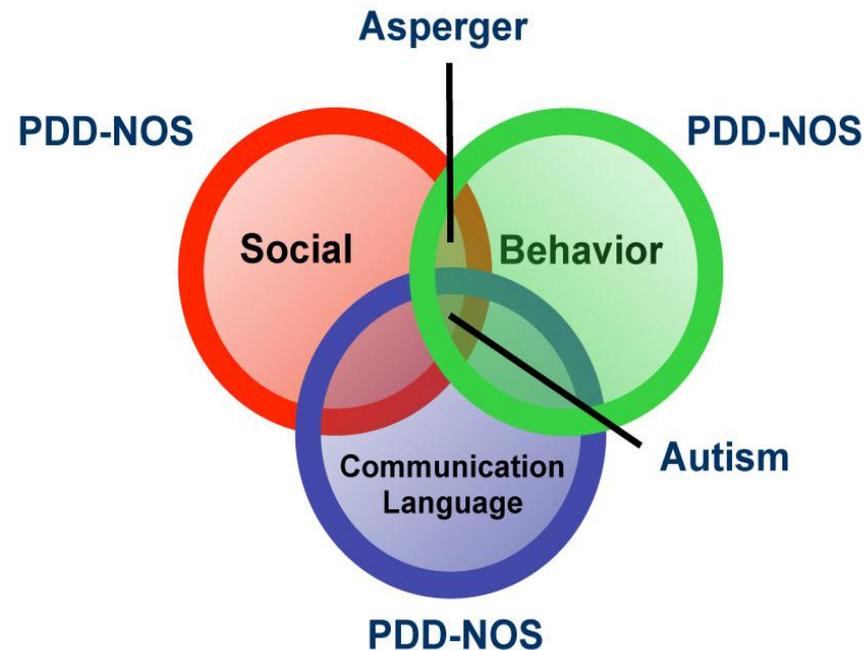
Co-Occurring Social Anxiety and Aggression in Youth with HFASD: Evidence of Emotion Regulation Problems

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April 15, 2012
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Autism Spectrum Disorders (ASD)

- Qualitative impairments in social interaction
- Qualitative impairments in communication
- Restricted repetitive and stereotyped patterns of behavior, interests, and activities



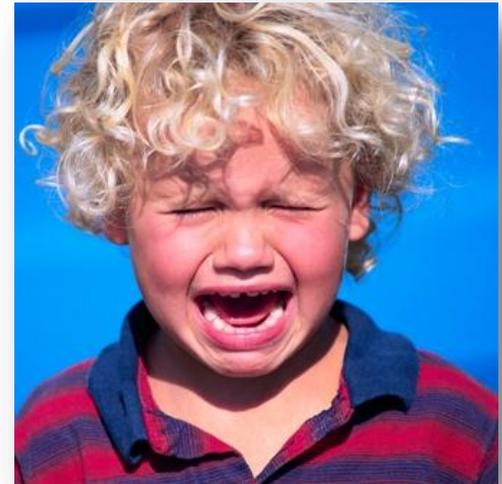
Emotion Regulation in ASD

- Deficit in the ability to name emotions
- Difficulty labeling own emotions
- Abnormal enlargement of amygdala in youth with ASD
 - May reflect increased activity
 - Links to socioemotional deficits in ASD
- Early emotion-related temperament differences in ASD
- Behavioral and neural underpinnings of emotion regulation processes in ASD remain poorly characterized



Emotion Regulation Development in ASD

- High levels of negative affect persist across lifespan
- Too much can hinder interpersonal relationships, attention, problem solving, and communication abilities
- An important goal is to maintain an optimal level of arousal through emotion regulation processes



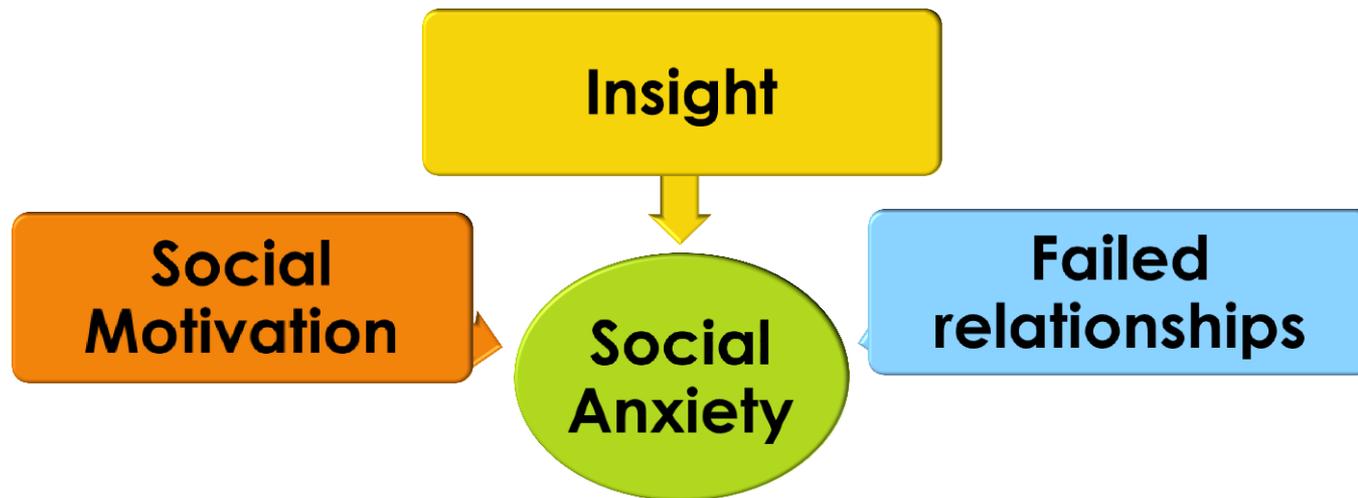
Individual Differences in Emotion Regulation

- No single emotion regulation or reactivity profile characterizes ASD
- Emotional presentation in ASD is heterogeneous
- Emotion regulation research is important to better understand individual differences and influences on outcomes



Co-Occurring Problems in ASD

- Anxiety problems are prevalent among children with HFASD, affecting approximately 40-45%
- Social anxiety is the most frequently reported anxiety in older children



- Problems with anger management and aggression are also common in HFASD

Social Anxiety & Aggression in ASD

- Emotional and behavioral problems co-occur in ASD
 - Social anxiety
 - Disruptive or aggressive behavior
- Prototypical social anxiety:
 - Behavioral inhibition, over regulation, aversion to risk
 - Social withdrawal and avoidance
- Social anxiety is also associated with anger and aggression
- Extreme fears of negative evaluation, combined with self-regulation deficits, may lead to increased aggressive reactivity in children with ASD

The Present Study

□ Purpose:

- To examine the degree to which social anxiety predicts aggression in children with HFASD

□ Hypotheses:

- Both excessive *and* deficient levels of social anxiety in children with HFASD place them at greater risk for aggression
- Moderately elevated social fears in children with HFASD should minimize aggression

Procedure

- Children and their parents presented for a comprehensive psychoeducational assessment at a university based clinic
- One graduate student clinician interviewed the parent(s) and administered parent measures
- A second clinician separately administered the child measures
- Consensus diagnoses were determined in a clinical conference overseen by a licensed clinical psychologist with 40 years of experience

Participants

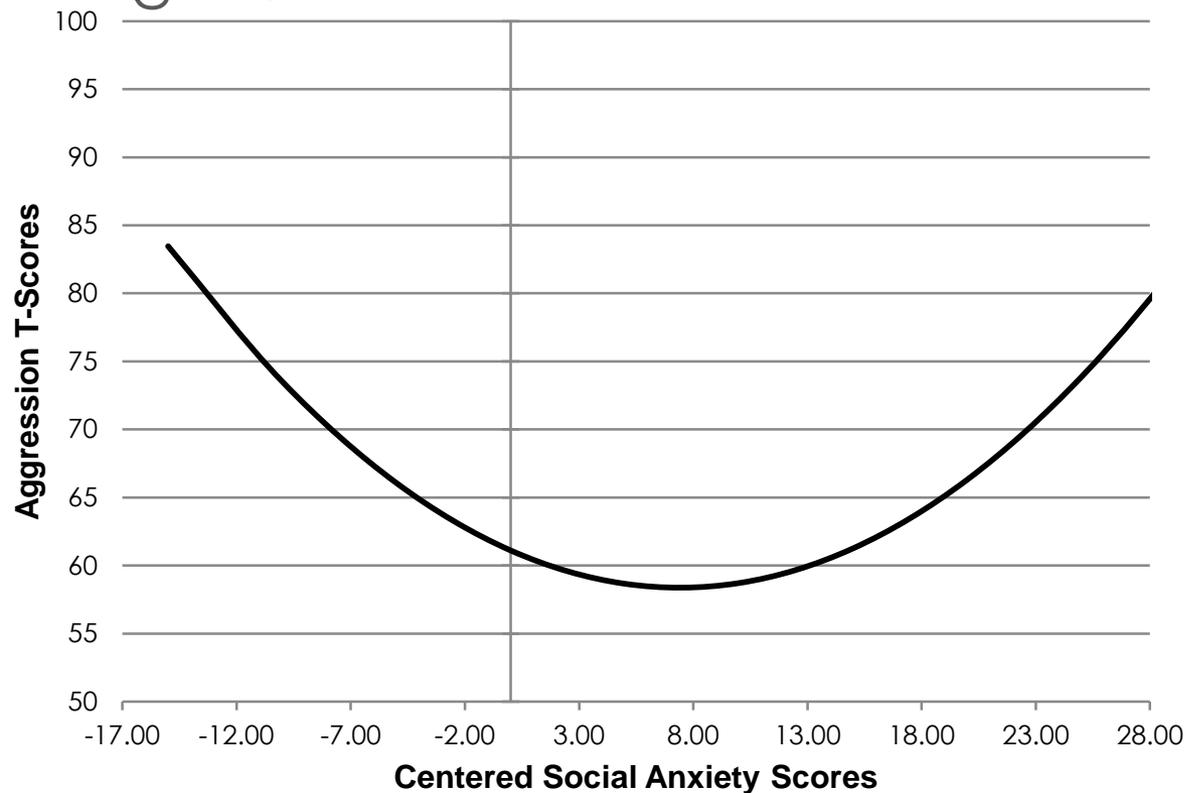
- All children screened on PDD module of the ADIS
- All diagnoses based on DSM-IV criteria during consensus meetings
- 20 children (2 females), 7-15 years old ($M = 11.75$, $SD = 2.94$)
 - Autistic Disorder ($n = 1$)
 - Pervasive Developmental Disorder-Not Otherwise Specified ($n = 9$)
 - Asperger's Disorder ($n = 10$)
- All children had IQ scores above 70 ($M = 93.75$, $SD = 12.94$)

Measures

- The Anxiety Disorders Interview Schedule
 - Semi-structured diagnostic interview for childhood disorders
- Child Behavior Checklist, Aggression Subscale
 - Maternal report assessing noncompliance and aggression
- Child Depression Inventory
 - Self-report measure of childhood depression
- Multidimensional Anxiety Scale for Children, Humiliation and Rejection Fears Scale
 - Self-report measure of anxiety
- Wechsler Intelligence Scale for Children, 3rd & 4th ed.

Results

- There was a significant curvilinear effect of humiliation and rejection fears on aggression explaining 47% of the variance



Discussion

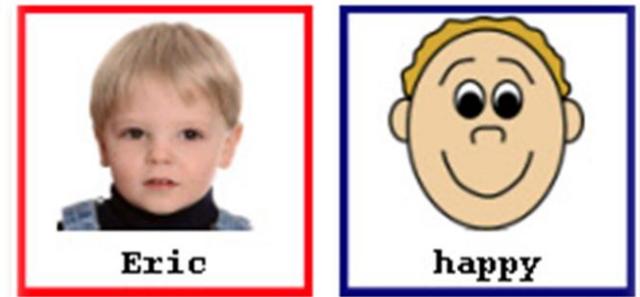
- Mild to moderate fears of humiliation and rejection may be 'optimal' in children with HFASD
- Aggression was highest in children who reported relatively low *and* relatively high levels of such fears
 - Low levels of social fears might reflect insufficient social concern or behavioral inhibition
- Socially anxious children with HFASD may have more difficulty generating and executing adaptive social problem solving strategies
 - Deficient executive functioning and emotion regulation difficulties

Limitations & Future Directions

- Cross-sectional study, precluding direct tests of causality
- Small sample consisting primarily of Caucasian, middle class youth
- HFASD diagnoses not confirmed by gold standard tools specific to the diagnosis of an ASD
- Inclusion of two informants
- Predictions based, but not directly tested with, hypothesized mechanisms, such as self-regulation deficits

Treatment Implications

- Treatment of problematic emotional responses in ASD is nonspecific
 - Often includes multiple psychotropic medications
- Targeting specific aspects of emotion regulation mechanisms enable better treatment match
- Packaged programs:
 - Aimed at improving description of emotions to identify and regulate their emotions
 - Face valid but not currently empirically supported or theoretically based



Thank You

This manuscript is currently under review

Social Anxiety & Aggression in ASD

- Youth with HFASD have:
 - Levels of social anxiety comparable to socially anxious group
 - Levels of aggression comparable to group with ODD/CD (Pugliese et al., 2010, in preparation)

