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

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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

Garon et al., 2009; Mazefsky, Pelphrey, & Dahl, 2012; Minshew & Keller, 2010; Rieffe et al., 2007
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

Chambers, Guillone, & Allen, 2009; Gross, 2008; Laurent & Rubin, 2004; Mazefsky, Pelphrey, & Dahl, 2012
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

Mazefsky, Pelphrey, & Dahl, 2012
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.

Bellini, 2004; Farrugia & Hudson, 2006; Klin et al., 2005; Kuusikko et al., 2008; Meyer et al., 2006; Sukhodolsky et al. 2008; White, Oswald, Ollendick & Scahill, 2009.
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

Beidel & Turner, 2007; DeWall et al., 2010; Erwin, 2003; Farrugia & Hudson, 2006; Green et al., 2000; Kashdan, 2009; Kim et al., 2000; Sofronoff et al., 2007
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

Scharfstein, Beidel, Sims, & Rendon-Finnell, 2011
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.

Silverman & Albano, 1996; Achenbach & Rescorla, 2001; Kovacs, 1992; March, 1997; Wechsler, 2003
There was a significant curvilinear effect of humiliation and rejection fears on aggression explaining 47% of the variance.
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
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)