

Understanding the Contribution of Anxiety to School Functioning in Transition-Age Youth with High Functioning Autism Spectrum Disorder

Gael I. Orsmond, Ellen S. Cohn, & Wendy J. Coster

Department of Occupational Therapy, Boston University, U.S.A.



Rationale & Objective

- Rates of anxiety are high in youth with ASD
- Researchers have described how anxiety is experienced by youth with ASD and their parents.
- Little is known about how school personnel view anxiety and how it impacts student functioning in high school.

Objective: To describe how school personnel perceive and address anxiety in high school students with ASD.



Method

- Conducted 5 focus groups with 23 school personnel.
 - Public and private schools.
 - Urban, suburban, and rural communities.
- Questions to understand how they prepare diploma-track high school students on the autism spectrum for life after school.
- Extracted all mentions of anxiety and conducted thematic analysis.

Participant Characteristics (N = 23)	% or Mean
Age	
18-39 years old	26%
40+ years old	74%
Female	87%
Years worked in school setting	<i>M</i> = 16.8 yrs
Years worked in high school	<i>M</i> = 11.8 yrs
Job title	
Director of special education	30.4%
Special education teacher	30.4%
Vocational counselor	13.1%
Speech language pathologist	13.1%
Transition coordinator	8.7%
Assistive technology specialist	4.3%

Results: Two Types of Anxiety

Mental health condition

- “Most of our students have co-occurring, significant mental health diagnoses. Either depression or anxiety, some with more psychotic features. So [helping them] identify and take some ownership around how to manage and recognize when the symptoms are either elevating or increasing, what aggravates [their] symptoms, what is helpful, who are [their] resources, what's [their] network to solve those problems outside of [school]. We like to see them coping when they're here, that's fine, but that's not really what we really want to see before they leave. We really want to see them coping by using resources that are outside of school.”

-Transition coordinator,
urban/suburban private school

Anticipated adult roles

- “Because I think a lot of our kids, when they get that disappointment, when they don't get that perfect grade, then it snowballs. And they [think] - okay I didn't get that A on my test, which means I'm not going to get into a good college, which means I'm not going to get a good job, which [means] I'm not going to be able to get married. “

-Speech language pathologist,
suburban public school

Results: Impact on School Functioning

“They are constantly at an anxiety level [like] a parent who is at home and **receives a phone call that one of their kids was just in an accident.** And, and that anxiety level is where they start their day.”

-Speech language pathologist, rural public school

“And they can't focus, they can't focus on anything ...and that's how my kids are every day, going from class to class... I still have this senior **who runs to get to the class because his anxiety** is, ‘But I have to get there!’ And I said, it'll be there when you get there, don't worry.”

-Speech language pathologist, rural public school

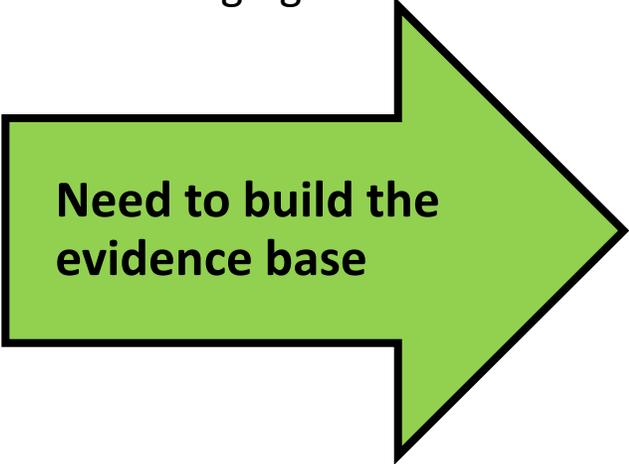
“We lost him for a good year and a half meaning like **he was barely able to access anything, any part of the curriculum.**”

-Special education coordinator, rural/suburban public school

Conclusions & Implications

Potential Roles for Occupational Therapists

- **Collaborate with teachers/other school professionals to:**
 - Implement cognitive behavioral therapy with students experiencing anxiety.
 - Promote school-wide efforts to support stress management and promote socialization in all students (e.g., yoga, mindfulness training, team-building activities).
 - Evaluate and modify the environment to support student success (e.g., modifying class schedule).
 - Provide spaces and activities that promote appropriate sensory modulation.
 - Modify assignments and other tasks (e.g., reducing homework load, flexible deadlines for challenging assignments).
- **Work individually with students to:**
 - Establish routines and habits that reduce uncertainty.
 - Identify and engage in enjoyable activities to promote optimal arousal or relaxation.
 - Develop effective self-regulation strategies.
- **Work with families to:**
 - Establish daily routines that balance social engagement and time alone.
 - Understand anxiety symptoms and how they might impact learning and socialization.



**Need to build the
evidence base**

Acknowledgements

Principle Investigators: Dr. Gael Orsmond & Dr. Wendy Coster

Co-Investigators: Dr. Ellen Cohn, Dr. Donna Lehr, Dr. Timothy Brown

Project managers: Elin Teutsch, Becky Chisholm

PhD Students: Jennifer Chen, Elizabeth Munsell, Jasin Wong

OTD Research Assistants: Colleen Hogan, Jade La Rochelle

Advisory Board: Jill Curry, Erika Drezner, Kathleen Kelly, Kimberly Oliveira, Christian Tsetsos

Contact: buroad@bu.edu
<http://sites.bu.edu/roadahead/>



The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant # R34A160113 to Boston University. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.



References

American Occupational Therapy Organization (n.d.). Occupational therapy's role in mental health promotion, prevention, & intervention with children & youth: Anxiety Disorders. Retrieved from: <https://www.aota.org/Practice/Children-Youth/Mental-Health/School-Mental-Health.aspx>.

Clarke, C., Hill, V., & Charman, T. (2017). School based cognitive behavioural therapy targeting anxiety in children with autistic spectrum disorder: a quasi-experimental randomized controlled trial incorporating a mixed methods approach. *Journal of Autism and Developmental Disorders*, 47, 3883-3895. <https://doi.org/10.1007/s10803-016-2801-x>.

Drahota, A., Wood, J. J., Sze, K. M., & Van Dyke, M. (2011). Effects of cognitive behavioral therapy on daily living skills in children with high-functioning autism and concurrent anxiety disorders. *Journal of Autism & Developmental Disorders*, 41(3), 257–265. <https://doi.org/10.1007/s10803-010-1037-4>.

Keehn, R.H.M., Lincoln, A.J., Brown, M.Z., & Chavira, D.A. (2013). The coping cat program for children with anxiety and autism spectrum disorder. A pilot randomized controlled trial. *Journal of Autism & Developmental Disorders*, 43, 57-67. <https://doi.org/10.1007/s10803-012-1541-9>.

Luxford, S., Hadwin, J.A., & Kovshoff, H. (2017). Evaluating the effectiveness of a school-based cognitive behavioural intervention for anxiety in adolescents diagnosed with autism spectrum disorder. *Journal of Autism & Developmental Disorders*, 47, 3896-3908. <https://doi.org/10.1007/s10803-016-2857-7>.

Reaven, J., Moody, E.J., Klinger, L.G., Keefer, A., Duncan, A., O'Kelley, S., Meyer, A., Hepburn, S., & Blakeley-Smith, A. (2018). Training clinicians to deliver group CBT to manage anxiety in youth with ASD: Results of a multisite trial. *Journal of Consulting and Clinical Psychology*, 86, 205-217. <http://dx.doi.org/10.1037/ccp0000285>.

Van Steensel, F.J.A., Bogels, S.M., Perris, S. (2011). Anxiety disorders in children and adolescents with autistic spectrum disorder. A meta-analysis. *Clinical Child and Family Psychology Review*, 14, 302-317. <http://dx.doi.org/10.1007/s10567-011-0097-0>.