Examining the effect of CBT across traditional and distinct anxiety symptoms in youth with ASD: Three Case Studies from a Facing Your Fears school-based trial

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**Overview**

- Anxiety symptoms in autism spectrum disorder (ASD) are heterogeneous and distinct (Kerns et al., 2014).
- Youth with ASD may present with traditional (e.g., separation anxiety) and/or distinct presentations of anxiety (e.g., fear related to change or special interests).
- Cognitive Behavioral Therapy (CBT) is effective for treating anxiety in youth with ASD in clinic settings (e.g., Weston, et al., 2016).
- Examining effectiveness in “real world” settings is critical.
- Delivering CBT within schools is of particular interest because schools are a primary service access point for youth with ASD (Mandell et al., 2005).

**Objective:** The present study examined the effects of a school-based CBT program for treating anxiety in ASD.

**Participants:**

- Three participants (10-13 years; 2 males, 1 female; See Table 1) from each of 3 participating school districts in the Denver Metro area.
- Eligibility criteria included:
  - Elevated anxiety symptoms (T-scores > 60) per the Social Responsiveness Scale, Second Edition (Constantino & Gruber, 2012).
  - Elevated anxiety symptoms (total or domain score(s) above clinical cutoff(s) per the Screen for Child Anxiety and Related Disorders (parent or child report; Birmaher et al., 1997).

**Measures:**

- The Anxiety Disorders Interview Schedule – Autism Spectrum Addendum (ADIS/ASA; Kerns, et al., 2017), a reliable and valid measure for assessing traditional and distinct anxiety presentations in ASD, was administered at pre- and post-intervention by a reliably-trained licensed psychologist.
- Clinically meaningful improvement was indexed by symptoms that met clinical cutoff(s) (e.g., Clinical Severity Rating > 4) at pre-intervention but fell below this cutoff at post-intervention.

**Methods**

- Facing your Fears (FYF; Reaven et al., 2011) is a manualized, evidence-based CBT program for treating anxiety in ASD.
- Participants were drawn from a larger trial of Facing Your Fears (FYF; Reaven et al., 2011), modified for delivery in schools by interdisciplinary school providers (FYF-School Based, FYF-SB).
- Design: Facing your Fears (FYF; Reaven et al., 2011) is a manualized, evidence-based CBT program for treating anxiety in ASD. Distinct and traditional symptoms of anxiety for a subset of participating children were examined.

**Results**

- **Student 1** showed meaningful improvements in: 2 specific phobias (bugs, noises), and worries about his special interests fears. Decreases in social evaluation concerns (i.e. social anxiety) occurred, but he remained fearful of social interaction (i.e. other social fears; see Figure 1).
- **Student 2** showed meaningful improvement in separation anxiety, fears of change and 3 specific phobias (elevator, doctor, loud noises). However, a novel specific phobia emerged (loud sounds) and there were no changes in his remaining specific phobia (thunderstorms) nor other social fear.
- **Student 3** showed meaningful decreases in generalized anxiety, 1 specific phobia (loud noises), but no change in other social fear.

**Conclusion:**

- Overall, students showed decreases in anxiety symptoms across multiple domains following participation in FYF-SB.
  - Importantly, all students showed improvements in traditional categories, while two of the three participants showed meaningful decreases in distinct anxiety symptoms.
  - However, FYF-SB appeared less effective in targeting social fears and social anxiety.
- Even for Student 1, who made improvements in social anxiety, and particularly in his fears of being negatively evaluated by others, he retained other social fears — fears that are potentially related to social confusion or social communication deficits.

**Future Directions:**

- The extent to which change in symptom expression corresponds to the symptoms targeted by FYF-SB will be examined in future studies.
- Future examinations will also examine whether targeting traditional anxiety symptoms led to generalization of improvements for distinct anxiety symptoms, and vice versa.

**Limitations:**

- The present study was limited in its small sample size. Larger, randomized control trials are needed to replicate the present findings and determine whether FYF-SB is effective in treating discrete and traditional anxiety domains in ASD.
- Other potential factors influencing treatment, such as provider treatment fidelity or treatment rapport, were not examined.

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**References**


