

**Treatment of
Comorbid Anxiety
Disorders in
Children with
Autism Spectrum
Disorder**

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Research Question

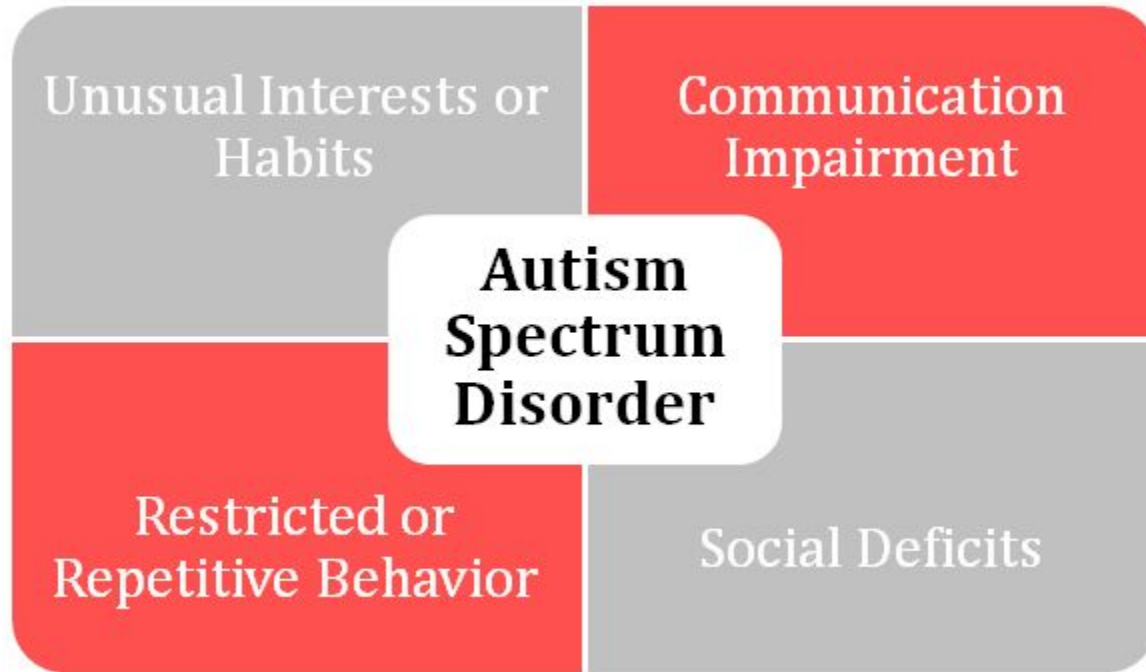
What is the most effective treatment option for treating comorbid anxiety disorders in children with Autism Spectrum Disorder?



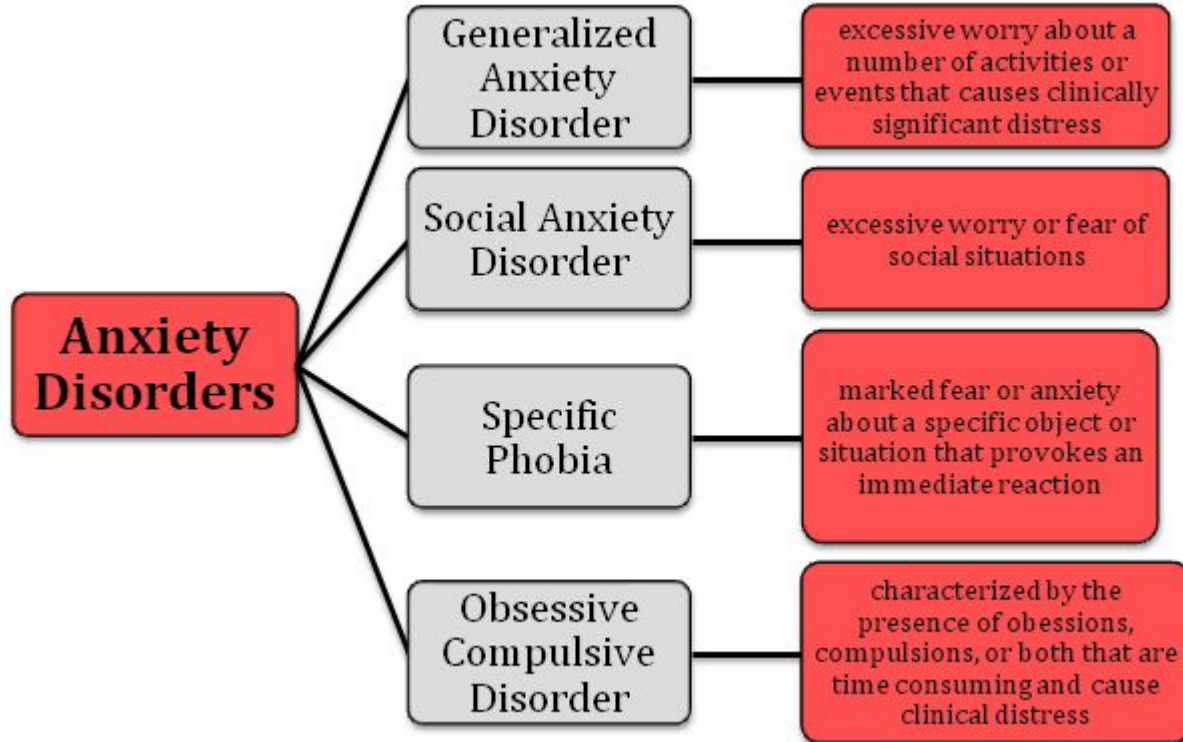
Explanation of the Problem

1. Prevalence rates of ASD are on the rise
 2. About 70% of those diagnosed have a comorbid disorder
 - a. 40%-50% are an anxiety disorder
 3. Research has not combined the two disorders
 - a. Goal of this research
-

Defining Terms



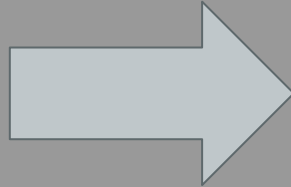
Defining Terms



Why?

- They experience the world differently
- They are more likely to experience anxiety and anxiety disorders than typically developing peers (Adams, 2019)
- Anxiety may present differently (Glod, Riby, & Rodgers, 2019)

Available Treatment Options for Children With Autism Spectrum Disorder



Cognitive
Behavioral
Therapy (CBT)

Learning &
Exposure
Therapies

Cognitive Behavioral Therapy

| Sample | Method | IV | DV | Results | Citation |
|--|-------------------------------|--|---------------------------|--|--------------------------------|
| 47 children aged 8-13 year olds who had a diagnosis of both ASD and clinically significant anxiety | Modified 'Cool Kids' program | Waitlist condition vs. CBT condition | level of anxiety symptoms | *CBT condition showed lowered levels of anxiety as compared to WL condition - $X^2(1, N = 47) = 24.889, p < .05$ *group x time interaction found | (Chalfont, 2007) |
| 22 children aged 8-14 years old with a diagnosis of ASD and at least one anxiety disorder. | Modified 'Coping Cat' program | Waitlist condition vs. CBT condition | level of anxiety symptoms | *CBT showed lowered levels of anxiety as compared to the WL condition - main effect of time: $F(1,20) = 13.80, p = .001, d = .83$ *group x time interaction found | (Keehn et al., 2012) |
| 40 students | MASSI program | CBT condition vs. no treatment condition | level of anxiety symptoms | *CBT condition showed lowered levels of anxiety as compared to the no treatment control condition - main effect of condition: $F(2,77) = 16.105, p = 0.000, \eta^2 = 0.093$ *group x time interaction found | (Ileri, White, & Mbwayo, 2019) |
| 45 children between the ages of 7 and 11 years | BIACA program | CBT + TAU condition vs. TAU condition | level of anxiety symptoms | CBT + TAU condition showed better results as compared to TAU condition - CBT = 75% treatment responders, TAU = 14% treatment responders, $p < .01, d = 1.59$ | (Storch et al., 2013) |

*These studies were chosen because they had the largest sample sizes and are all relatively recent

Learning & Exposure Therapies

01

Contingent Reinforcement

- Use of positive and negative reinforcement to increase desired behavior
- Consequences for different actions

02

Response Blocking

- Physically preventing a maladaptive behavior from occurring

03

Gradual Exposure Therapy & Systematic Desensitization

- In a safe environment
- Exposed to thing they are fearful over a set period of time

04

Reinforced Practice

- Type of exposure therapy
- Rewarded for remaining in presence of feared stimulus

05

Stimulus Fading

- Errorless teaching
- A piece of target stimulus is introduced or altered before gradually fading away

Important Takeaways

Current Research?

What does the current research say about treatment methods for anxiety in children with ASD?



- CBT is the most effective
- Learning & exposure therapies also promising

Interactions?

Are there any significant interactions that should be noted?



- Group x Time interaction

Ideas for the Future of the Field

- Could increase day to day functioning for children with ASD
- Further exploration of CBT as a treatment method for this population is needed
 - Comparing methods
 - Overall
 - Situationally

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