Treatment of Comorbid Anxiety Disorders in Children with Autism Spectrum Disorder

> Melissa Trout Arcadia University

Research Question

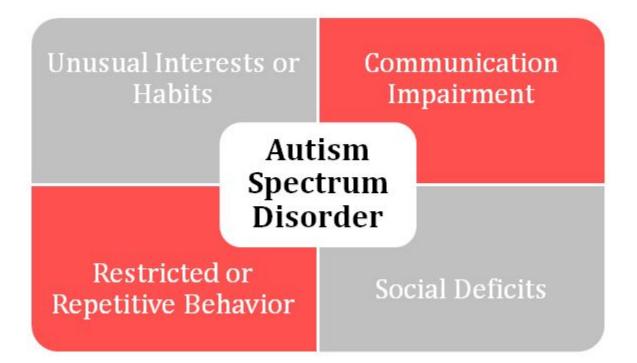
What is the most effective treatment option for treating comorbid anxiety disorders in children with Autism Spectrum Disorder?



Explanation of the Problem

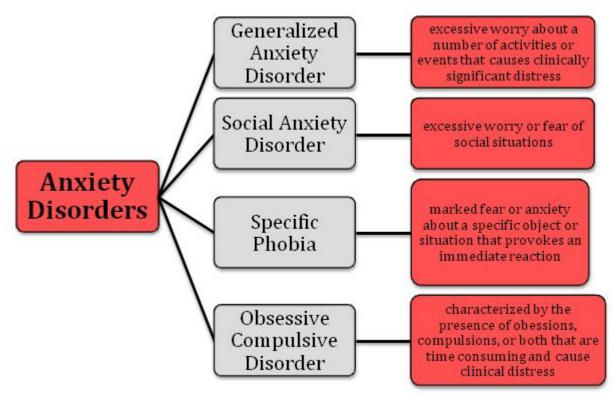
- 1. Prevalence rates of ASD are on the rise
- 2. About 70% of those diagnosed have a comorbid disorder
 - a. 40%-50% are an anxiety disorder
- 3. Research has not combined the two disorders
 - a. Goal of this research

Defining Terms



Johnson, 2004 American Psychiatric Association, 2013, p. 50-51





American Psychiatric Association, 2013

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, $p = 0.000$, $n^2 = 0.093$ *group x time interaction found	(Ireri, 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			
	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			
(Lydon et al. 2015) (Hudnell 2017) (Kearney Linning & Alvarez 2015) (Kaplan & Tolin 2011) (Allen & Cowen 2005) (Errorless Teac					

(Lydon et al., 2015), (Hudnell, 2017), (Kearney, Linning, & Alvarez, 2015), (Kaplan & Tolin, 2011), (Allen & Cowen, 2005), (Errorless Teaching)

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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