

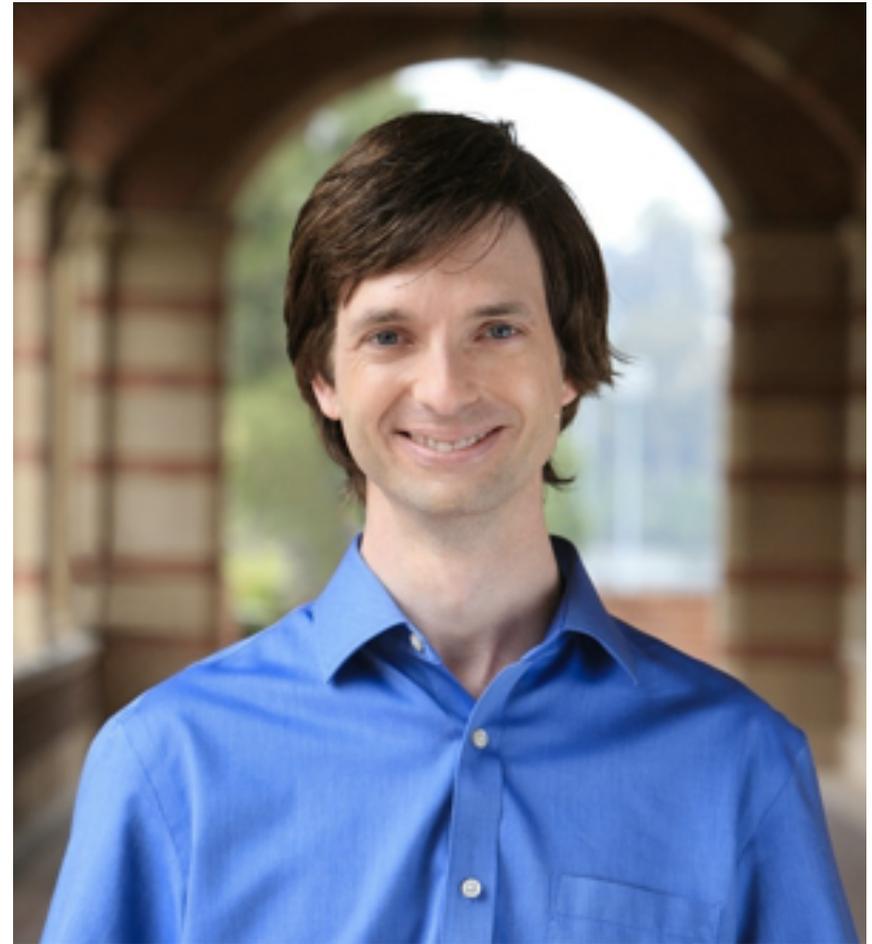
Sponsored by AUCD's Autism Special Interest Group

Adaptations of CBT for people with Autism Spectrum Disorders

April 27, 2020

Presented by:
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UCLA

Professor Jeffrey Wood received a Ph.D. in Clinical Psychology from the UCLA Psychology Department, specializing in clinical trials of cognitive-behavioral therapy for childhood anxiety disorders and OCD. Dr. Wood has attained multiple grants to study cognitive-behavioral interventions for school-aged children with autism.





CBT for Severe Anxiety in Youth with ASD

Jeffrey Wood, UCLA

General Overview

- ▶ Anxiety--a common mood state
- ▶ Clinical anxiety in ASD
- ▶ Possible origins of anxiety in ASD
- ▶ Cognitive behavioral approaches to intervention

Psychiatric Comorbidity in ASD

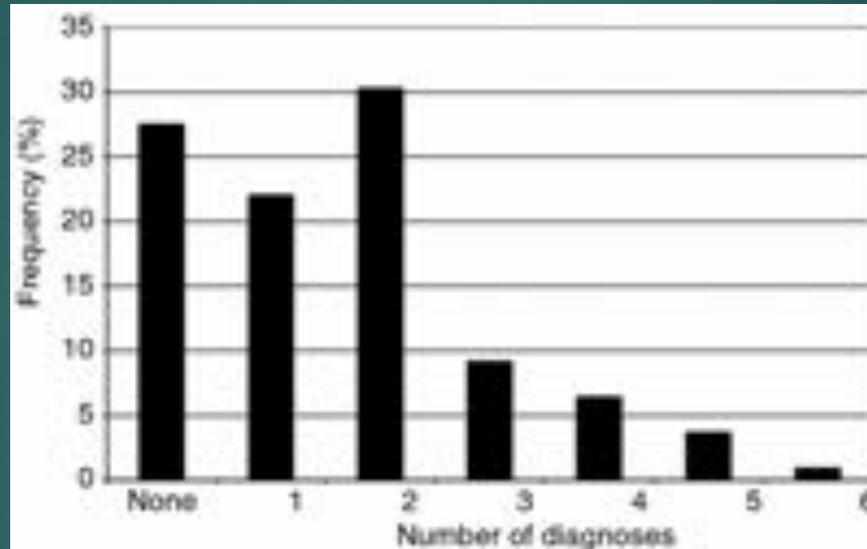
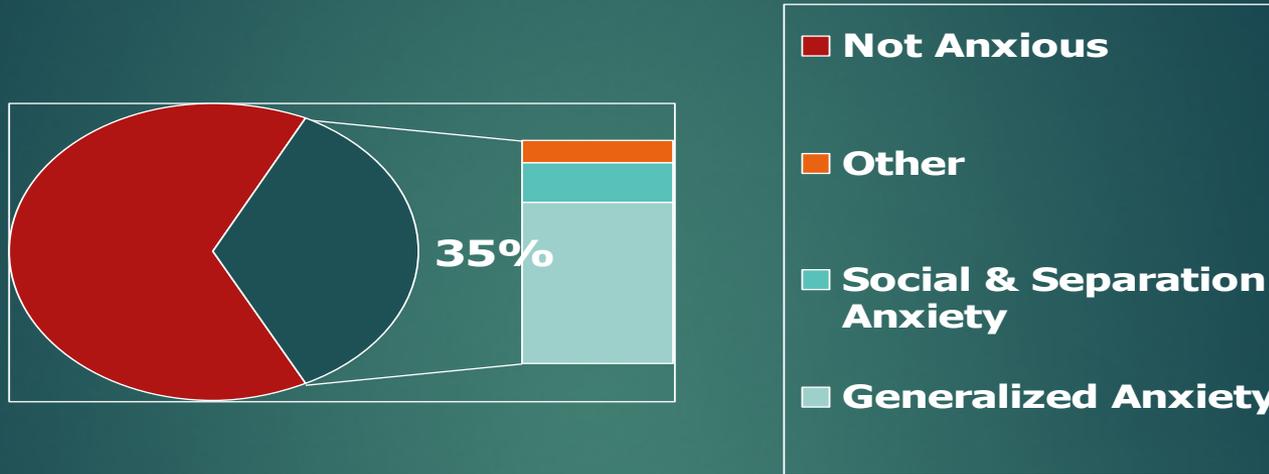


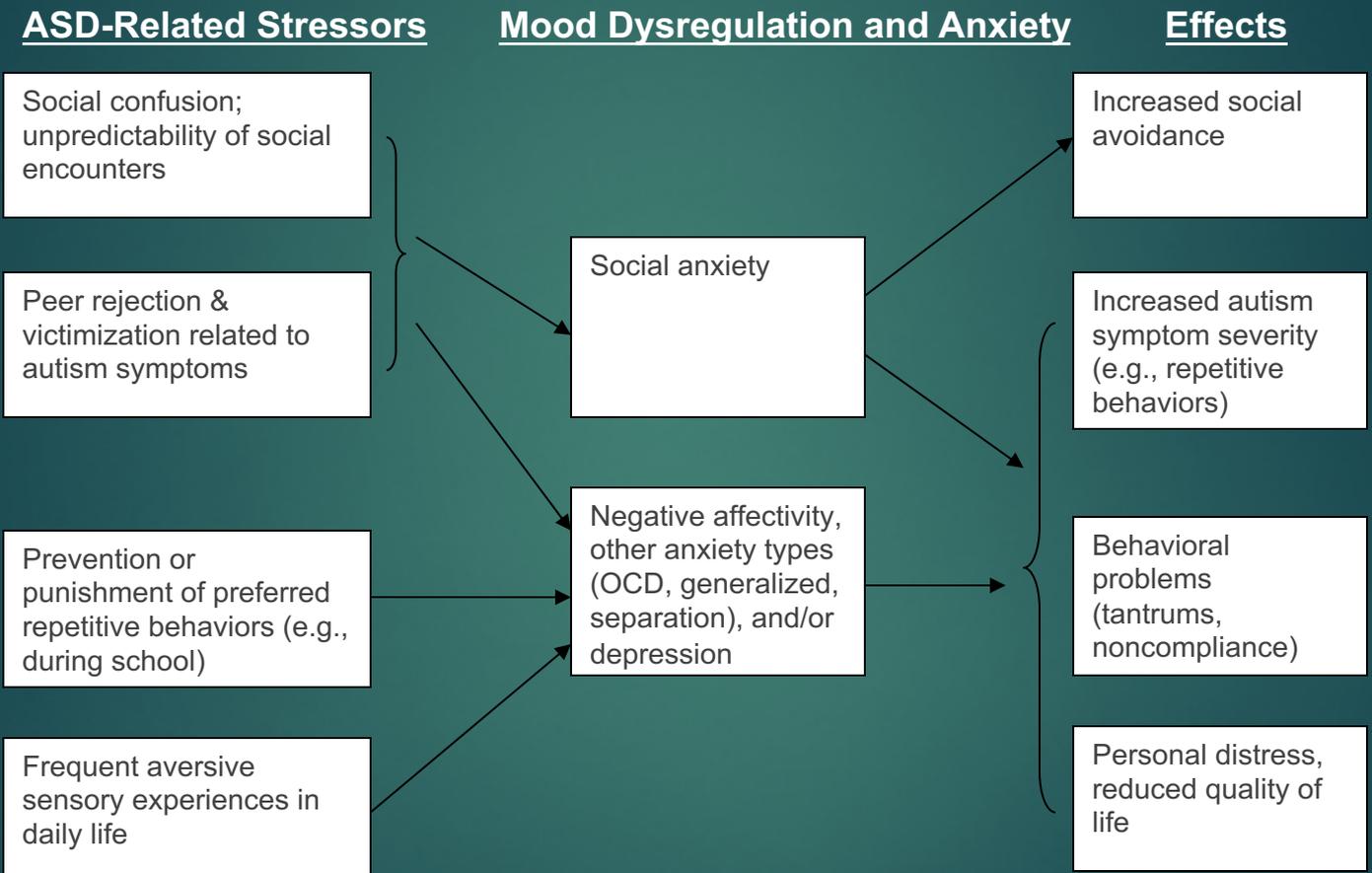
Fig. 1 Frequency of the number of comorbid lifetime psychiatric diagnoses per child with autism. Only DSM-IV diagnoses are included (Leyfer et al. 2006)

Anxiety Disorders in ASD



- **Separation anxiety:** fearfulness re: safety of self and loved ones. Associated with avoidance of certain situations (e.g., playdates, school) and dependence or “clinginess” to adults.
- **Social phobia:** associated with shyness, fear of embarrassment, social reticence. Leads to social isolation & few peer friendships.
- **Generalized anxiety:** excessive worry about daily events, past & present (e.g., homework, tests, popularity, health...). Associated with tension, irritability, aches/pains, or difficulty sleeping...

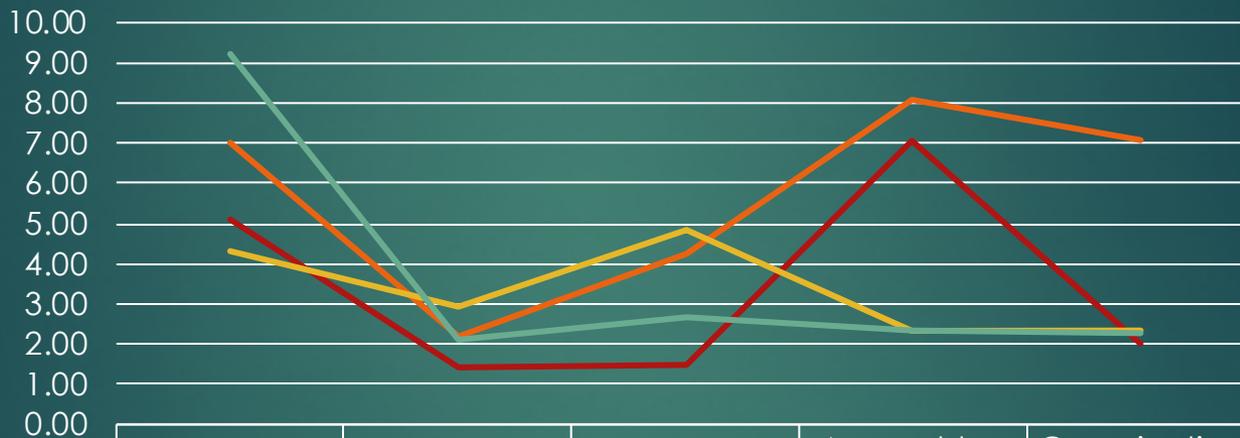
Hypothetical Model



(Wood & Gadow, 2010)

Personality Trait Clusters (N = 196)

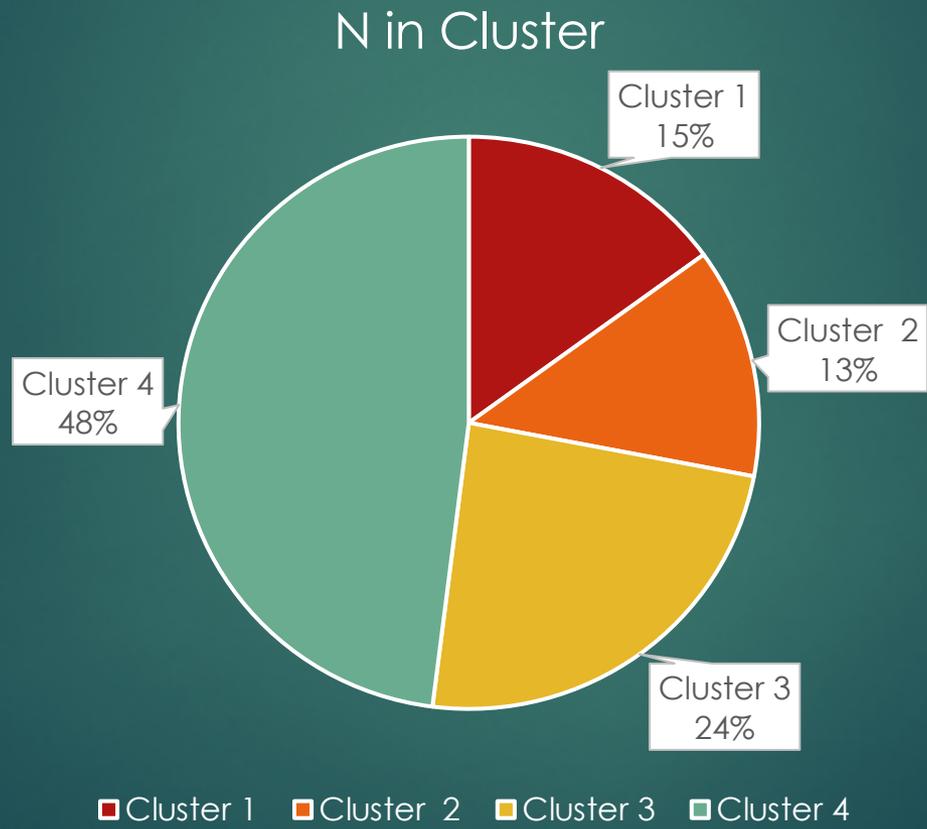
Cluster Profiles



	Anxiety	Extraversion	Openness	Agreeableness	Conscientiousness
Cluster 1	5.10	1.42	1.48	7.06	2.00
Cluster 2	7.04	2.19	4.27	8.08	7.08
Cluster 3	4.29	2.94	4.84	2.33	2.37
Cluster 4	9.22	2.11	2.66	2.34	2.27

Cluster 1 Cluster 2 Cluster 3 Cluster 4

Size of Clusters



HETEROGENEITY OF ANXIETY IN ASD

- ▶ There was a large, generally dysregulated group with high anxiety that also had the highest overall ASD symptom severity
- ▶ There was a relatively more “focal” anxiety group that had less general dysregulation, mainly experienced harm avoidance and separation fears, and was agreeable

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- ▶ One group, cluster 1, had high social anxiety scores in the context of very low extraversion and high social withdrawal—rejection vs. disinterest
 - ▶ Normative trait anxiety, highly agreeable—is low social motivation falsely registering as social anxiety?
 - ▶ Is solitary style a risk for bullying?
 - ▶ Are requirements to be sociable triggering stress and thus anxiety?

CBT for Anxiety in ASD

- ▶ Several clinical trials have been conducted on CBT for anxiety disorders in children with ASD, with evidence success.
- ▶ A number of group CBT treatments have been studied with some success (e.g., Reaven, 2012).
- ▶ A personalized CBT program for children (6-14 years) with autism, Behavioral Interventions for Anxiety in Children with Autism, has five preliminary studies supporting its efficacy, with large ES vs. waitlist or TAU (Wood et al., 2009, 2015; Fujii et al., 2013; Storch et al., 2013, 2015).

BIACA Intervention

- ▶ 16 weekly outpatient meetings, 90 minutes each
 - ▶ 45 minutes with the youth
 - ▶ 45 minutes with the parents and/or family
 - ▶ Core focus: coping with anxiety and facing fears
- ▶ Optional school visits & consultations
 - ▶ Aim: incorporating home-school note, social coaching, peer buddies, and gamesleading opportunities into youth's school program

Modifications to CBT

- ▶ Adaptations to a CBT program (Wood & McLeod, 2008) were based on research & clinical experience in ASD.
 - ▶ Broaden hierarchy to include social communication, repetitive behaviors, and undercontrolled behaviors
 - ▶ Partially reverse cognitive and behavioral elements
 - ▶ Playdates, peer “buddy” programs at school
 - ▶ “Social coaching” at home and school
 - ▶ Large scale rewards system; home-school note
 - ▶ Using visual stimuli and special interests

Parent's Role

- ▶ Administer reward system consistently
- ▶ Encourage / remind about daily tasks (exposures and social practicing)
- ▶ Overseeing playdates, promoting good hosting
- ▶ Social coaching as philosophy all day long
- ▶ Modeling adaptive thoughts and social behavior
- ▶ Interfacing with school on home-school note
- ▶ Promoting independence in daily self-help skills and providing related positive feedback

3-Site Study of BIACA vs. Coping Cat and Usual Care

- ▶ 167 children with ASD
- ▶ Diagnoses confirmed-ADOS-2, CARS
- ▶ IQ > 70
- ▶ Ages 7-13 years (M = 9.9 years)
- ▶ Clinical anxiety– PARS \geq 14
- ▶ Random Assignment to Three Treatment Groups: Coping Cat (n=71), BIACA (n=77), Treatment-As-Usual (TAU; n=19)

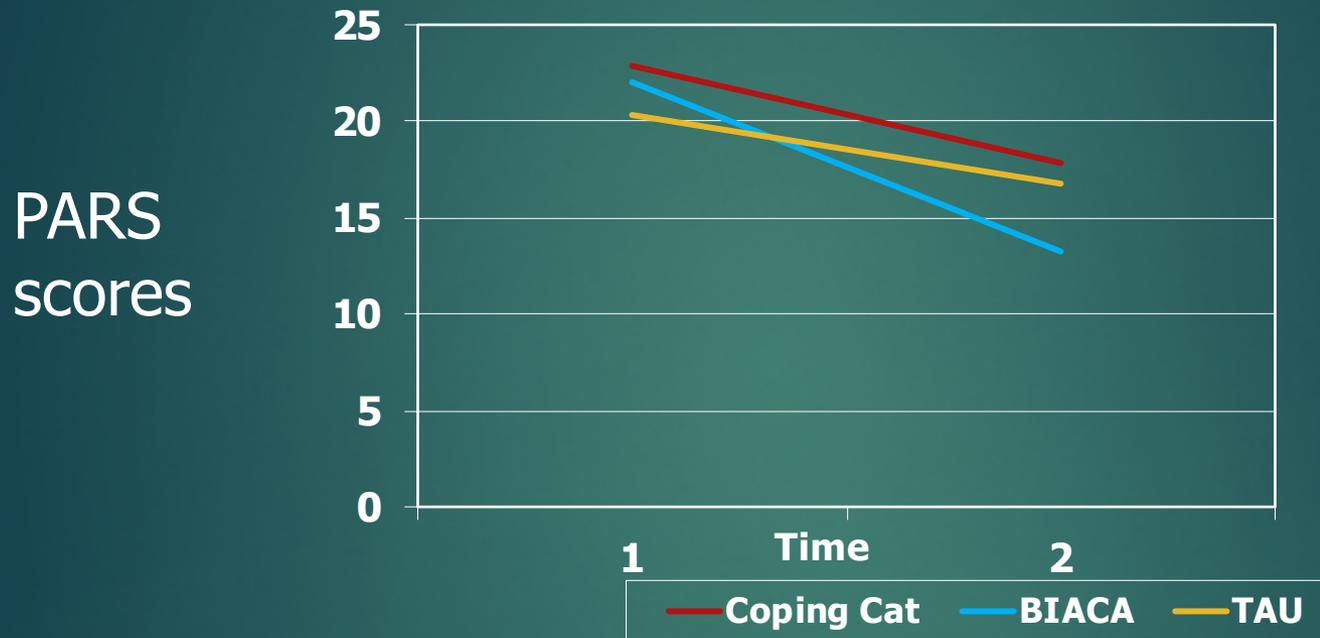
Usual Care (TAU)

- ▶ Families were permitted to choose or maintain any treatment approach for 3 months in the TAU condition. TAU has been found to be a robust comparator in youth psychotherapy studies (Weisz et al., 2017).
- ▶ 12 of 17 children received psychological or psychiatric care during the TAU period.
 1. One child began a new psychiatric medication.
 2. One child changed a medication dose.
 3. Eleven children received one or more forms of psychosocial intervention (e.g., 1:1 counseling/therapy, group counseling, speech/social skills training).

3-Site Study Sample (N=167)

Variable	Percent
% Boys	79%
% Married	77%
% Latino	22%
% Caucasian	64%
% African American	6%
% Asian	7%
% Mixed	8%
% On medication	28%
Stimulants	13%
SSRIs	11%
Alpha Agonists	8%

Pediatric Anxiety Rating Scale (Primary Outcome)

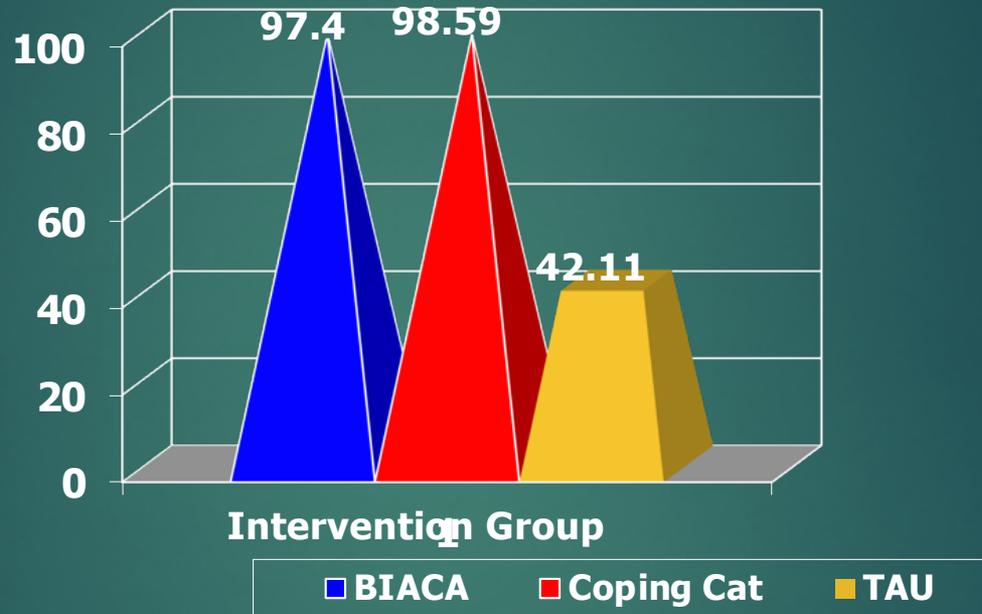


Planned Comparisons ($p < .05$):

BIACA > Coping Cat, TAU

CGI-I at Post-Treatment

CGI-I: %
Responders

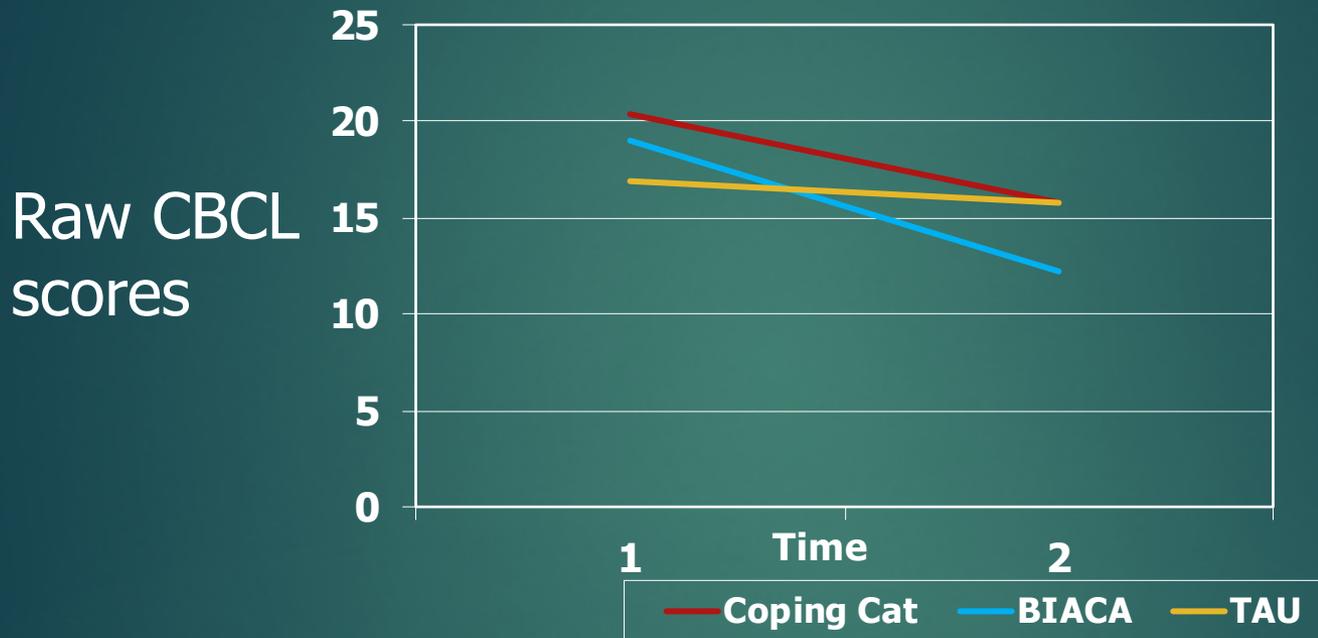


Planned Comparisons ($p < .05$):

BIACA > TAU

Coping Cat > TAU

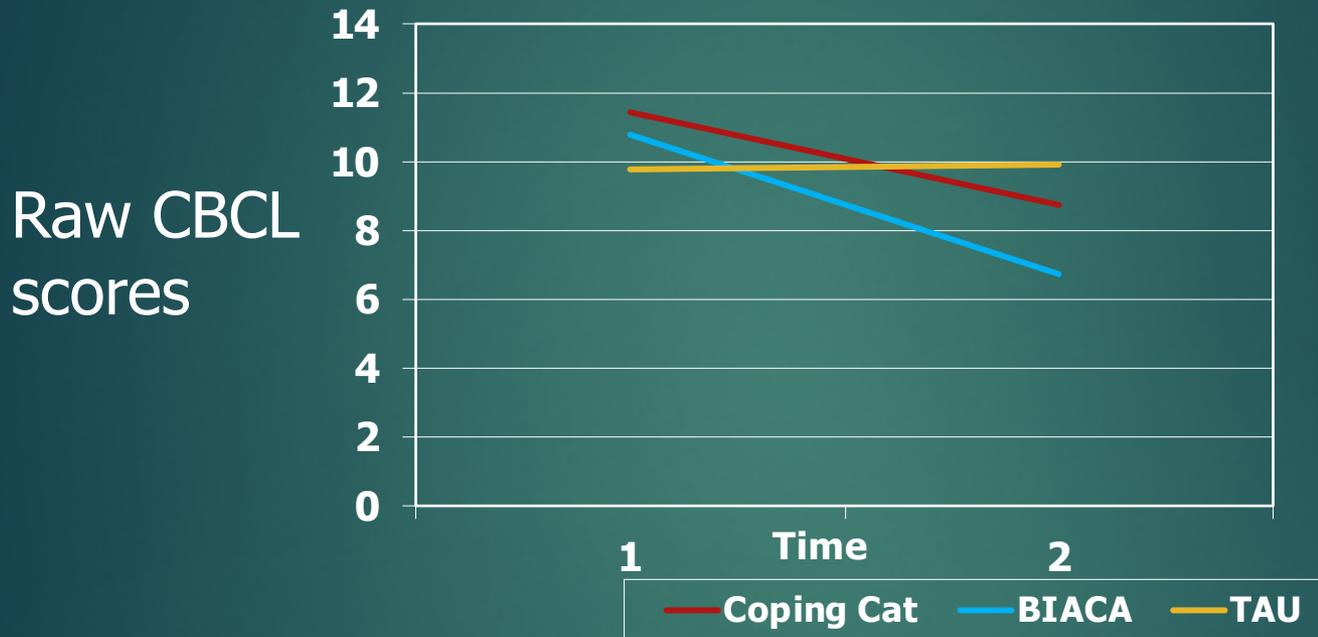
CBCL Internalizing Scale



Planned Comparisons ($p < .05$):

BIACA > Coping Cat, TAU

CBCL Anxiety/Depression Scale

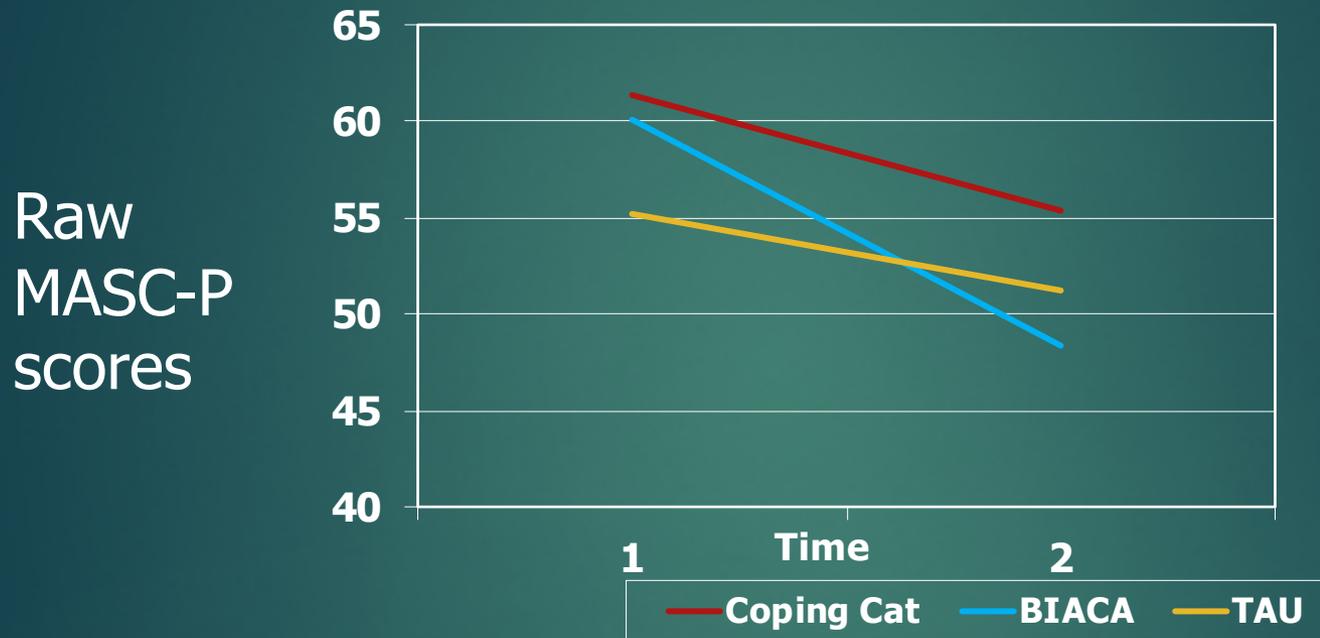


Planned Comparisons ($ps < .05$):

BIACA > Coping Cat, TAU

Coping Cat > TAU

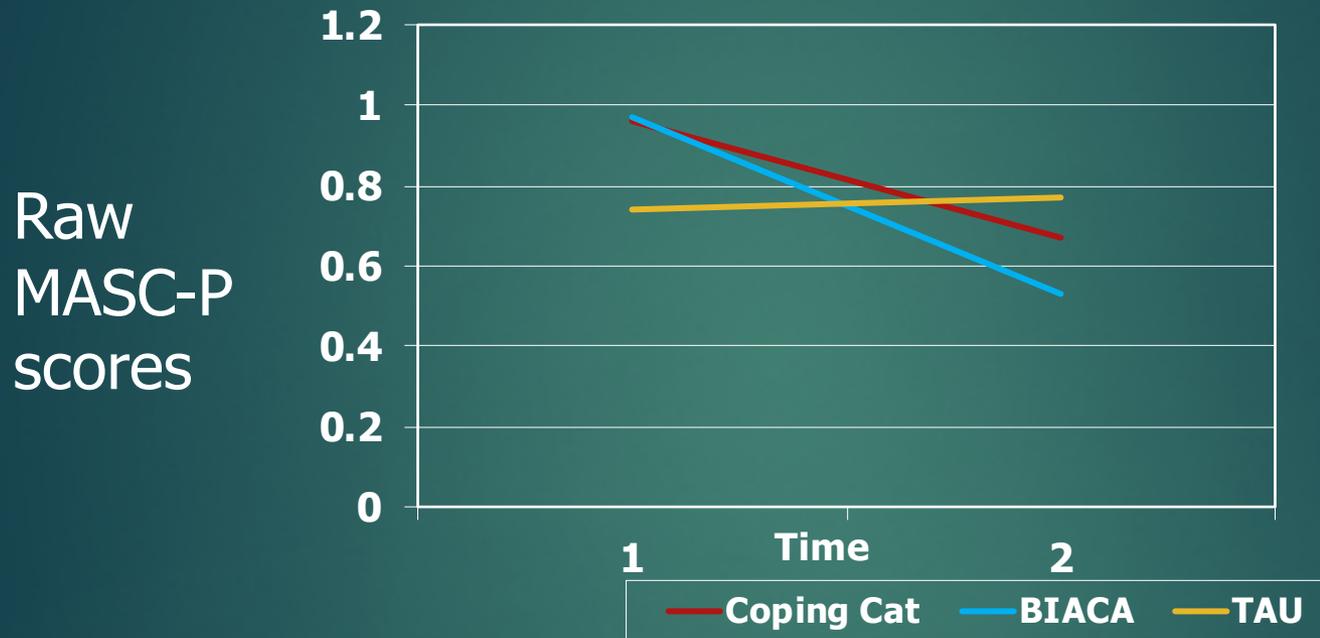
MASC-P Total Score



Planned Comparisons ($p < .05$):

BIACA > Coping Cat, TAU

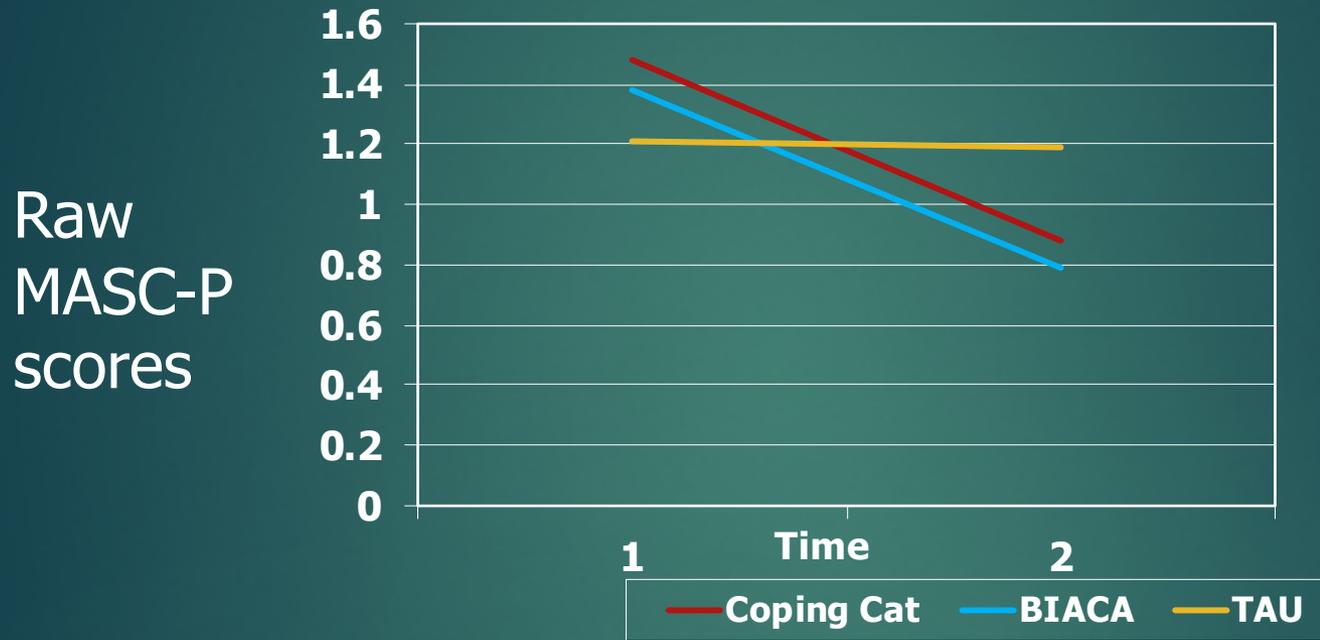
CAIS-Social Score



Planned Comparisons ($p < .05$):

BIACA > Coping Cat, TAU

CAIS-School Score

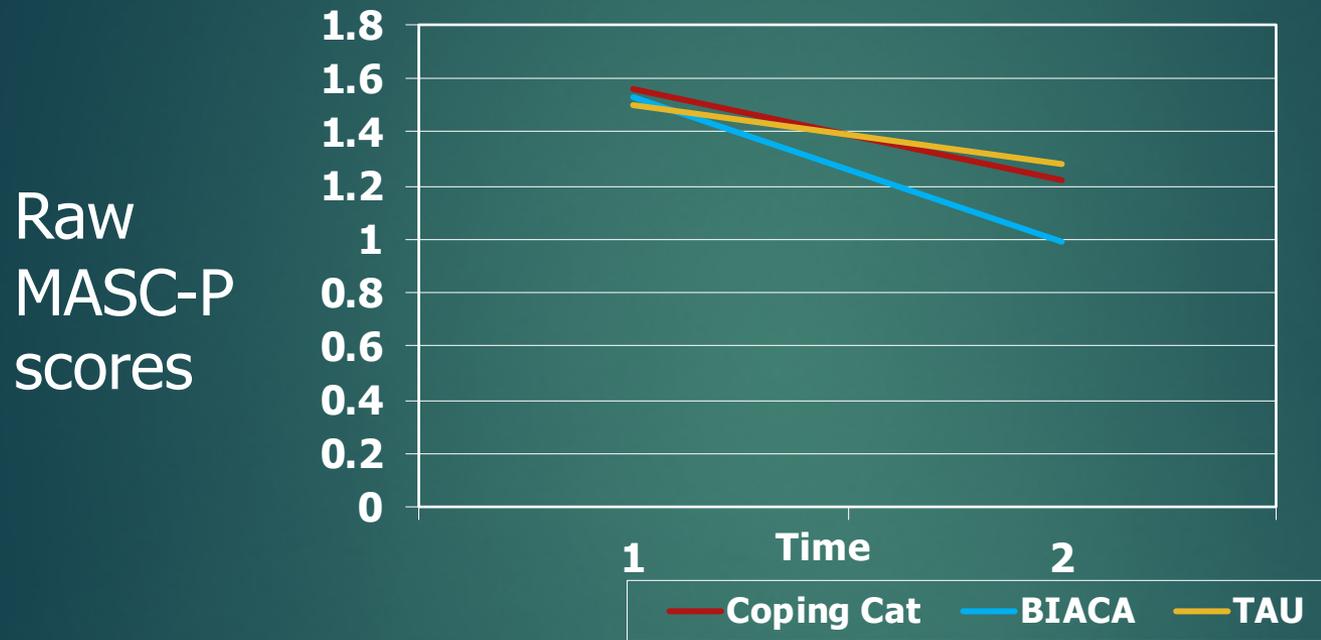


Planned Comparisons ($p < .05$):

BIACA > TAU

Coping Cat > TAU

SRS-2 Social Comm. Impair.



Planned Comparisons ($p < .05$):

BIACA > TAU

BIACA > Coping Cat

Clinical Technique of BIACA

- ▶ Exposure therapy using a hierarchy is the foundational behavior change tool for this clinical area.
- ▶ Nonetheless, supplemental cognitive therapy elements may promote generalization and offer a tool for rapport building and motivation to engage in exposures.
- ▶ Video demonstration.

Adaptability Conferred By Semantic Concepts

1. Concept: “Monsters don’t really exist.”
 - ▶ Situation 1: Bedtime: “They’re not under my bed.”
 - ▶ Situation 2: School: “They’re not in the closet.”
2. No concept, just habituation / extinction:
 - ▶ Situation 1: Bedtime: gets in bed willingly.
 - ▶ Situation 2: School closet: “...There are monsters here!” Phobic response.

Enhancing Schema Recall



- ▶ When the same “cue” is linked with 2 or more memory representations, 3 elements affect which is activated.
 - ▶ Elaborated rehearsal with deep semantic processing (Anderson et al., 1994; Baddeley, 1990)
 - ▶ Maximize the similarity of the cues at the formation of the original memory and the cues at the formation of the new memory (Tulving, 1979)
 - ▶ Encode distinct features for the new competitor memory (Anderson et al., 2000)

Sample Hierarchy

Category	Sample Group Activity	Difficulty Rating (0-10)
Being Alone / Separation (Stairs at Dad's House)	Going to the top of stairs alone and staying for 10 sec (no one else upstairs)	0?
	Going to the top of stairs alone and going into a room for 10 sec. (no one else upstairs)	5?
	Going to the top of stairs alone and going into a completely dark room for 1 or 2 min. (no one else upstairs)	10?
Making Mistakes on Purpose	Making a small mistake (e.g., on homework, on piano) in front of brothers, <i>acting like it wasn't a mistake</i> (e.g., showing the wrong answer), <u>and keeping cool the whole time.</u>	3?
	Making a mistake on purpose <i>when it counts</i> (e.g., turn in a wrong answer on homework, play piano for someone who doesn't know it is a "challenge" and mess up on purpose in front of them), <u>keeping cool the whole time.</u>	10?

Category	Sample Group Activity	Difficulty Rating (0-10)
Losing games with a calm attitude	Play a very quick game like tic tac toe and <i>lose on purpose</i> , keeping cool the whole time	0?
Trying difficult school work by myself, calmly	Try for at least 1 minute on a “more difficult” or “bonus” type of problem from school that I normally avoid—have a calm attitude the whole time, be ok with maybe being wrong, and don’t ask for help.	1?
Trying new activities at home with a great attitude	Try a new or “scary” TV show with my family for 30 min., and no matter what it's about, have a great attitude (make a comment showing I'm interested; try to see what is funny or informative about it; don't complain about it or try to avoid it)	3?
Being calm when packages are late	When I order something on Amazon, stay calm when I have to wait an extra 15 minutes longer than I expected for it to arrive (this is a role play for when the package is already here)	3?
Bad dreams	Draw a picture of a scene from a bad dream	2?



Lego Points!

Task	MON	TUES	WED	THURS	FRI	SAT	SUN
Practice having 1 conversation about a topic mom/dad bring up. They will tell me when we're going to practice this. I will ask at least two questions in a row about the topic to show I am interested. It is ok if mom/dad points out when I could ask the second question.							
Playing a game with a SMALL rule change while keeping my cool and going with the flow (e.g., can't start in the middle spot in tic-tac-toe or Connect 4; the oldest person gets to go first; etc.)							
Practice loaning and borrowing! I will let J. use one of my toys for a minute or two while I stay in the room and make sure she keeps it safe. She will let me use one of hers at the same time.							



Superstar Chart!

	Mon	Tue	Wed	Thurs	Fri
<p><u>GOAL 1:</u> Trying hard when writing! (Either hand-written, or typed). My teachers will give me a specific goal for each assignment for how much I should write, and I will do so without complaint.</p>					
<p><u>GOAL 2:</u> Participating in large and small groups. I will make at least 2 comments or ask at least 2 questions per group. (I can wear 2 colorful bracelets on my left wrist that I'll move to my right wrist after each comment/question to help me remember to do this.)</p>					

Key Treatment Issues in BIACA

- ▶ Interest—need for therapist flexibility and acceptance (e.g. of poor eye contact / oddities)
- ▶ Need for visual support
- ▶ Need for concrete language and SCAFFOLDING of child's language and psychological concepts
- ▶ “Just do it” kids
- ▶ Motivation is everything—go all out on rewards in and out of session for most children
- ▶ Parents are critical allies in the treatment

Next Steps



- ▶ MEYA—A free internet based training platform for clinicians intended to disseminate CBT and BT for school-aged youth with ASD. Developed in a grant funded by NIMH.
- ▶ meya.ucla.edu

CONCLUSIONS

- ▶ Important individual differences may typify subgroups within ASD, even among those who present as having clinical anxiety
- ▶ These groups may differ markedly in emotional, regulatory, and interpersonal profiles, with possible biological or experiential underpinnings
- ▶ Personalizing treatment effectively may require recognition that anxiety may have different meanings for different children, with some experiencing general dysregulation, others situationally-based anxiety, and others an anxiety-like profile possibly attributable to low extraversion

Please take a few moments to complete our post webinar evaluation survey at the close of this webinar.