Module 8:
Cognitive Behavioral Therapy (CBT) Consideration for TAY ASD

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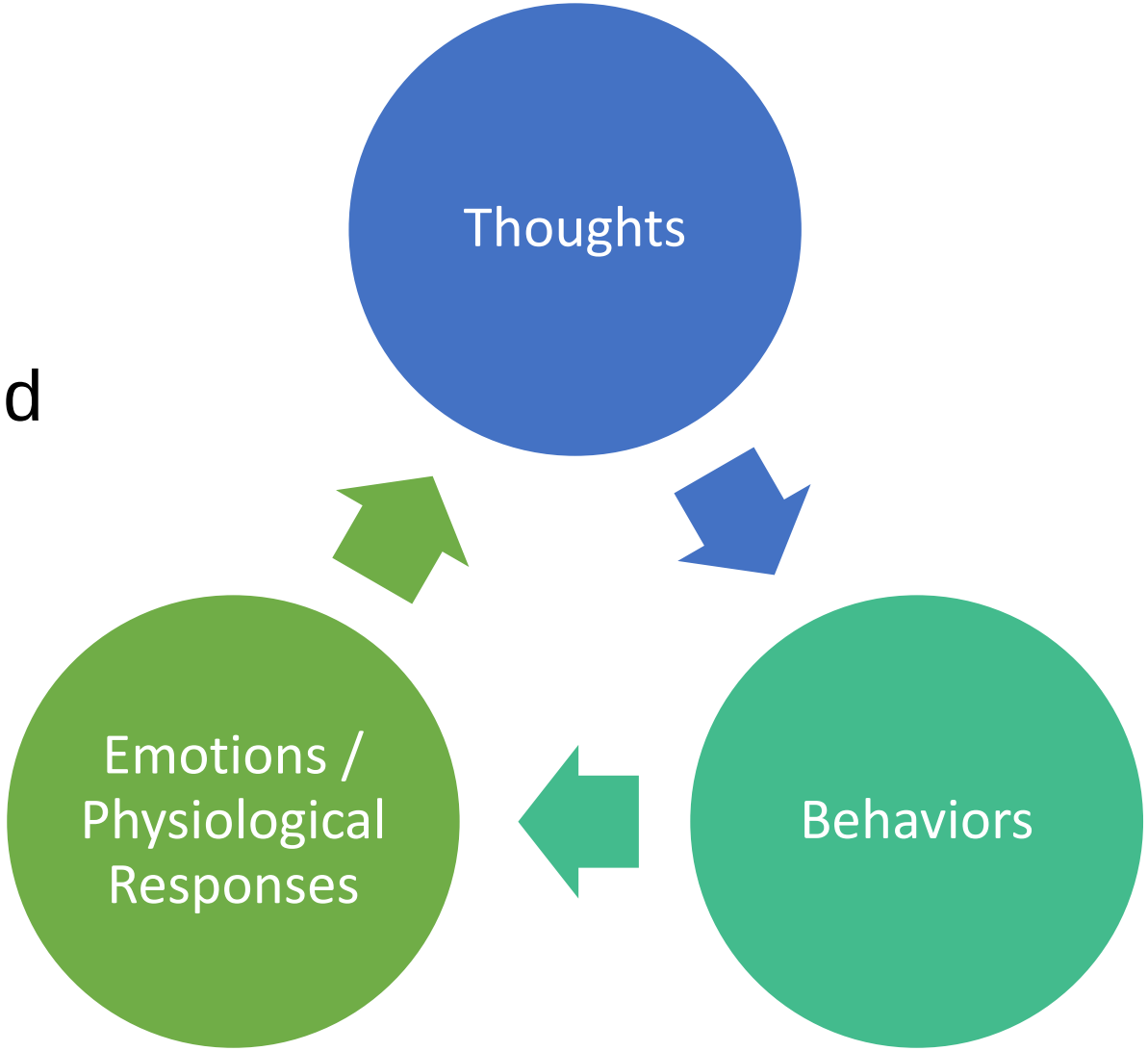
Overview

- What is CBT?
- Has CBT been applied to clients with ASD?
- Anxiety & ASD
- What does research tell us about the use of CBT in ASD populations?
- What co-morbidities is CBT helpful for?
- What are the limitations of existing research on CBT for TAY ASD?
- What should I be observing in my clients to know whether CBT is right for them?
- Where can I go to learn about specific evidence-based interventions for anxiety among individuals with ASD?

What is CBT?

- First line behavioral treatment for a range of mental health and behavioral disorders
  - Skills-based
  - Present-focused
  - Time-limited
  - Goal-oriented
  - Structured
  - Foundations are in learning theory



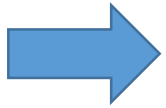
Has CBT been applied to clients with ASD?

(Kendall, Hudson, Gosch, Flannery-Schroeder, & Suveg, 2008)

- The majority of research has focused on school-age children with high functioning ASD
  - Anxiety
  - Social Skills

CBT conceptualization:

- Anxiety is the result of physiologic arousal, extreme/rigid thinking, and avoidance behavior.



CBT intervention:

- Skills in reducing physiologic arousal and extreme thinking, followed by exposure to feared stimulus/situations.

Anxiety and ASD

(de Bruin et al., 2007; Kanner, 1943; Leyfer et al., 2006; Muris et al., 1998; Simonoff et al., 2008)

- Anxiety disorder are common in children and adolescents with ASD
  - 40-84% for ANY anxiety disorder
    - 8-63% for specific phobias
    - 5-23% for generalized anxiety
    - 13-29% for social anxiety
    - 8-27% for separation anxiety
- Beyond distress, anxiety is associated with functional impairment
- Anxiety is a top reason for referral to mental health

What does research tell us about the use of CBT in ASD populations?

- A 2013 meta-analysis of CBT for Anxiety in children with high-functioning autism (Sukhodolsky, Bloch, Panza, & Reichow, 2013)
  - Inclusion:
    - Patient population with primary diagnosis of ASD
    - Must have comparison (waitlist, treatment as usual)
    - At least one assessment of anxiety
  - At the time of the review, no studies had been published on the use of CBT for anxiety in children with IQ below 70

What does research tell us about the use of CBT in ASD populations?

<u>CBT v. Treatment as Usual (TAU) or Waitlist Controls</u>

- 8 studies were identified that met inclusion criteria

- 2013 Meta-analysis (comparison of effect sizes across studies) found that
  - CBT was superior to control conditions in terms of **clinician-** and **parent-**rated measure of child anxiety compared to control condition
  - No differences were observed in **child-**rated anxiety symptoms in CBT versus control condition
  - Overall, the magnitude of the effect of CBT on anxiety relative to waitlist controls was similar to the effects of CBT on anxiety in typically developing children.

(Sukhodolsky, Bloch, Panza, & Reichow, 2013)

What does research tell us about the use of CBT in ASD populations?

CBT v. TAU, Waitlist Controls, Social Reaction (Ung et al., 2015)

- 14 studies were identified that met inclusion criteria
  - Extended the 2013 meta-analysis by Sukhodolsky et al.

- 2015 Meta-analysis (comparison of effect sizes across studies) found
  - Efficacy for CBT for high functioning youth with ASD and anxiety is robust
  - Provided a descriptive report of CONTENT in each reviewed intervention
  - Group v. Individual did not moderate treatment outcomes
  - Informant types did not moderate treatment outcomes, yet reporter reliability remains a significant problem in clinical trials.

What does research tell us about the use of CBT in ASD populations?

- 7 studies were identified that met inclusion criteria [2000-2013]

- 2015 Meta-analysis (comparison of effect sizes across studies) found that (Kreslins et al., 2015)
  - CBT is efficacious for anxiety in high functioning youth with ASD
  - Wide heterogeneity across treatments, lack of clarity on active ingredients/ core mechanisms of change.
    - “Kitchen Sink” approaches
  - More research need to distill interventions, and reduce burden of implementation

What should I be observing in my clients to know whether CBT is right for them?

- Measurement of Anxiety in ASD populations (Bodfish et al., 2000; Esbensen et al., 2009; Kerns et al., 2012; Ruta et al., 2010; Volkmar et al., 1999)
  - Debate in the field on whether anxiety in ASD is a true co-morbidity, or simply a manifestation of core ASD symptoms.
    - Thus, it may be difficult for parents and clinicians to distinguish anxiety from ASD on self-reports, and in clinical practice

ASD Feature	Anxiety Presentation
Insistence on sameness	Distress due to changes in routines
Repetitive behaviors	OCD: Repetitive behaviors to reduce anxiety; Interruption of repetitive behaviors in ASD can produce anxiety
Impaired social interactions	Social Anxiety: Distress associated with impaired social interactions
Awareness of social isolation	Social Anxiety & Depressive symptoms [withdrawal]
Recurring bothersome thoughts	OCD: recurring intrusive thoughts, with repetitive behavioral or mental rituals to reduce distress associated with thoughts

What co-morbidities is CBT helpful for?

- Although the majority of effectiveness and efficacy trials have focused on anxiety symptoms, there is no reason to believe that CBT would not be helpful for other CBT interventions that are appropriate for typically developing youth.
  - In the absence of empirical evidence, clinical judgment and acumen guide practice

- Previous studies in anxiety point to specific adaptations to CBT interventions that should be considered when treating youth with high-functioning ASD and comorbid anxiety or mood disorders.

What ways can I adapt CBT interventions for individuals with ASD?

<u>Mapping Treatment onto Case Conceptualization</u>

- CBT requires verbal communication
- The verdict is out on application of CBT for individuals with IQ <70, but no evidence that use of behavioral intervention is harmful. Use your clinical judgment!

- One challenge with non-verbal youth, is that assessment in CBT require the ability for one to observe themselves (to take a distance perspective)
- When assessing for treatment targets, CBT requires the ability to identify both the topography and the FUNCTION of the behavior.
  - A patient needs to be able to verbalized, whether repetitive behaviors are involuntary / sensory related versus attempts to modulate anxiety/affect

What ways can I adapt CBT interventions for individuals with ASD?

Assessment

- There is evidence that anxiety can be reliably diagnosed using structured psychiatric interviews, such as ADOS
- Remember that children may not perceive their anxiety-related behaviors as problematic as their parents do (so multiple sources of data are needed in good psychiatric assessment).

Symptom Tracking

- When tracking symptoms as part of CBT, collect data from parent as well (when possible).
  - If the client is attending therapy alone, arrange a strategy with parent, family member, or another adult in the clients home to gather regular data.

What ways can I adapt CBT interventions for individuals with ASD?

<u>Mapping Treatment onto Case Conceptualization</u>

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- Common targets
  - Restricted repetitive behaviors
  - Social/communication deficits
  - Anxiety associated with the above

What ways can I adapt CBT interventions for individuals with ASD?

- Breaking anxiety management skills into concrete small steps
- Adding visual aids
- Adding written assignments
- Giving a greater role to parents in helping to gain mastery of skills
  - In some cases, parents may need to learn and apply CBT skills to their own experiences
    - This can assist in the parent's ability to coach, as well as track observable indicators of anxiety over time.
- Use teachback method when providing psychoeducation

(Moree et al., 2010)

What ways can I adapt CBT interventions for individuals with ASD?

- Because individual with ASD have difficulties in labeling their thoughts and feelings and the thoughts and feelings of others:
  - Social stories can be helpful
  - Visually represented social interactions
  - Social coaching, including behavioral rehearsal

(Moree et al., 2010)

What ways can I adapt CBT interventions for individuals with ASD?

- Like ALL good CBT, use session time to
  - Review skill practice from previous week
  - Teach new skill
  - Practice skill together in session
  - Simplify or reduce assignment for next week if needed
    - If the client shows good comprehension of Steps 1-6 on a task, then assign complete task
    - If the client shows good comprehension of Steps 1-2, then only assign homework on Steps 1-2
- Structure especially helpful for youth with ASD, so the structure of CBT is a great fit for this population

(Moree et al., 2010)

What ways can I adapt CBT interventions for individuals with ASD?

Homework

- Skills is the active ingredient in all CBT treatments
  - We want to set clients up to success! So keep this in mind when assigning homework
  - Homework assignment may also include strategizing with client on how best to accomplish homework
    - Who can help? What kinds of materials did you receive in session that could help you? What can you do if you feel overwhelmed by the task?

(Moree et al., 2010)

What ways can I adapt CBT interventions for individuals with ASD?

Treatment Targets

Cognitive	Behavioral
Inaccurate appraisals of social situations	Experiential avoidance (people, places, things, memories, emotions)
Strong negative beliefs about self, others, world [inflexibility]	Rituals / repetitive behaviors to reduce anxiety
Difficulties in labeling of emotions	Lack of reinforcing activities in daily life (isolated, inactive)

What ways can I adapt CBT interventions for individuals with ASD?

Applied CBT Strategies

Cognitive restructuring, behavioral rehearsal

Cognitive Restructuring

Visual guides / menus of emotions

Cognitive	Behavioral
Inaccurate appraisals of social situations	Experiential avoidance (people, places, things, memories, emotions)
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Graduated Exposure

Exposure to feared stimuli, and prevention of ritualizing

Behavioral Activation

Where can I go to learn about specific evidence-based interventions for anxiety among individuals with ASD?

- There remains a lack of comparative effectiveness trials, but these are interventions that have been rigorously tested in you with high-functioning ASD.

- Manualized Treatments are available, and can be delivered in group or individual format
  - See ***resources***

Where can I go to learn about specific evidence-based interventions for anxiety among individuals with ASD?

CBT Components in Manualized Treatments:

Cool Kids	*Building Confidence*	*Exploring Feelings*	*Coping Cat / Fighting Worry & Facing Fears*	*Facing your Fears*	*Multi-modal anxiety and social skills*	*Behavioral interventions for anxiety in children*
Labelling emotions and physical reactions to anxiety	Labelling emotions and physical reactions	Labelling emotions and physical reactions	Labelling emotions and physical reactions	Labelling emotions and physical reactions	Labelling emotions and physical reactions	Labelling emotions and physical reactions
Cognitive restructuring; helpful/unhelpful thoughts	Coping skills followed by in vivo exposure, creation of fear hierarchy	Physical, social, and thinking skills [tailored to individual needs]	Cognitive restructuring	Relaxation training	Cognitive restructuring	Relaxation training ('coping skills')
Coping self-talk	Friendship skills		Anxiety management techniques	Creation of fear hierarchy	Relaxation training	Creation of fear hierarchy
Relaxation Training	Taught through guided conversation (Socratic questioning)		Creation of fear hierarchy, exposure	Graduated exposures	Exposures	Exposures
Exposure to feared stimuli and ritual prevention			Use of behavioral/token reinforcement strategies		Social skills training	Social skills training
Role play teaching method, visual aids, structured worksheets			Taught through written and visual materials, concrete language		Parent coaching	Development of peer relationships
			Use of sensory stimulating objects, computer		Sessions taught through handout and hands on activities	

Resources

- Links to manualized CBT treatment programs (Ung et al., 2015) can be found on Module 8 of the curriculum website under “Resources”

Questions?

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