### **Cognitive Behavior Therapy for Children with Autism** Arlene Ortiz, PhD, NCSP

California Association of School Psychologists Annual Convention Costa Mesa, CA

October 13, 2023

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### **Meet Your Presenter**

- Assistant Professor of Teaching at UCSB, Department of Clinical, Counseling, & School Psychology
- Nationally Certified School Psychologist
- Licensed Clinical Psychologist, Bilingual
- 2-Year Child Psychology Post-Doc at the University Center for Excellence in Developmental Disabilities, CHLA
- CA-LEND Trainee: Leadership Education in Neurodevelopmental and Related Disabilities (LEND)
- Supervise School-Based Counseling Fieldwork for School Psychology Graduate Students



### Learning Objectives

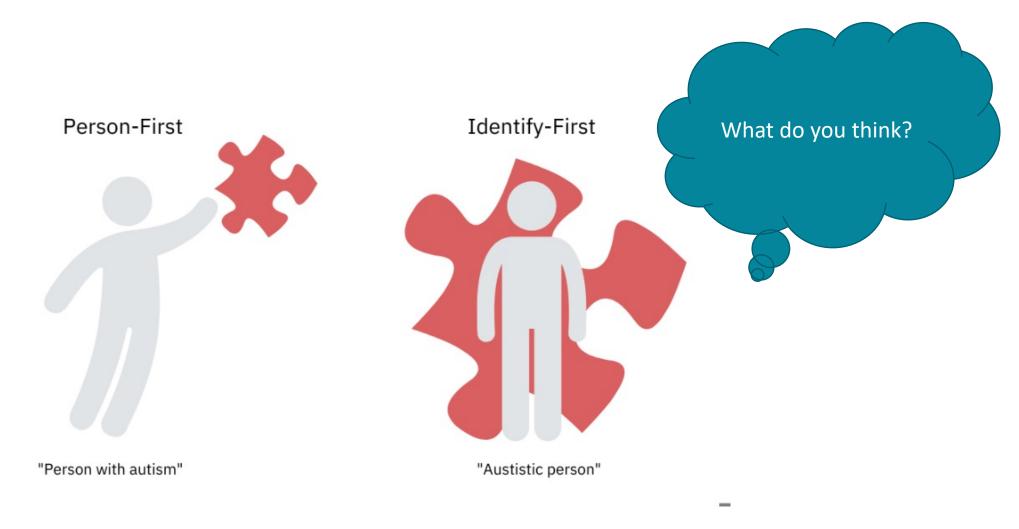
- Participants will gain knowledge about important considerations for providing therapeutic support to children with ASD.
- Participants will learn concrete cognitive behavioral therapy techniques to utilize when working with children with ASD and internalizing conditions.

### Agenda

- Language Considerations
- Background
  - CBT and Autism
- Adapting CBT for Children with Autism
- Other Considerations
- Sample Programs

### Person First vs Disability First Language

### Person First vs. Identify First Language



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# Ask First

**Background** Autism & Social-Emotional Wellness

### **Autism**

- Persistent deficits in each of three areas of
  - Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history
    - A. Deficits in social-emotional reciprocity.
    - B. Deficits in nonverbal communicative behaviors used for social interaction
    - C. Deficits in developing, maintaining, and understanding relationships
  - Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history
    - A. Stereotyped or repetitive motor movements, use of objects, or speech
    - B. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior
    - C. Highly restricted, fixated interests that are abnormal in intensity or focus
    - D. Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment

### **Prevalence of ASD and Comorbid Conditions**

ASD affects approximately 1 in 36 U.S. children.

ASD affects 1 in 22 children in California.

Approximately 78% of the children with ASD have at least one mental health condition, such as depression or anxiety

Only 43% of mental health providers report providing behavioral health care for children with ASD

Maenner et al. (2020); National Survey of Children's Health, (2016)



### **Challenges for Youth with ASD**



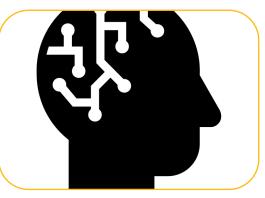
Self-regulation



Rigid thought processes / Concrete Thinkers



Poor social understanding



Limited capacity to generalize



 Anxiety is emotion characterized by feelings of tension, worried thoughts, and physical changes (e.g., increased blood pressure) – American Psychological Association



### Anxiety Problems in Children: Major Characteristics

#### Thoughts

- Excessive worry in general
- Thoughts center around danger / threat
  - Fear/anxiety regarding specific situations or events
- Negative and unrealistic thoughts
- "Catastrophic" misinterpretation of symptoms/events

#### Behaviors

- Obsessions/ compulsive behavior
- Pacing
- Fidgeting
- Clinging
- Avoidance
- Excessive need for reassurance

#### Physical Response

- Panic attacks
- Physiologic arousal/ hypersensitivity
- Muscle pain
- Tight chest
- Somatic complaints

# **Cognitive Behavior Therapy (CBT)**

- CBT is one of the leading recommended therapies for depression and anxiety based on research and clinical case studies
- CBT is generally as effective or more effective than antidepressant medications and has longer lasting results
- Focuses on teaching students how to restructure cognitions to produce more appropriate behaviors
  - The cognitive component helps children change how they think about a situation and the behavioral component helps children change how they react to a situation.



### Who Can Benefit From CBT?

- Elementary age students up through adolescence and adulthood with modifications based on the student's stage of cognitive development and maturity
- Most ideal for children with Average and beyond cognitive functioning, though those with below average cognitive functioning can still benefit with additional modification

### **Research Supports CBT for Children with Autism**

Children with ASD have the prerequisite skills to engage in CBT (Lickel et al., 2012)

Adaptations of cognitive behavioral therapy help children with high functioning ASD deal with anxiety and depression, better manage social situations, and recognize emotions (Danial, 2013)

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50% or more of children with ASD who patriciate in a modified CBT treatment program show a positive treatment response (e.g., Reaven et al., 2012; Weiss et al., 2018)

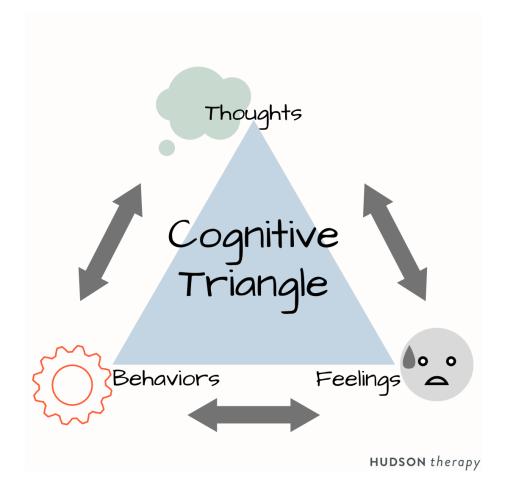
### Adapting CBT for Children with Autism

### What CBT Does Not Do for Children with Autism

- CBT does not treat ASD
- CBT treatment is centered on issues related to the life experiences of an autistic individual
- May Include: depression, bullying, stress, anger, aggression, anxiety, social skills deficits, and limited social support



### The CBT Triangle: Where to Start



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# Adapting CBT for Children with Autism

#### Focus on strengths/talents and special interests

 Need to creatively adapt and adjust CBT to meet the strengths and needs of the individual

#### **Experiential and Concrete**

- Use consistently clear & concise language
- Use visual cues
- Weekly Sessions: Provide a visual structure and establish a predictable routine
- Establish Rules
- Incorporate hands-on activities

#### Careful pacing of sessions

 Incorporate movement breaks and sensory activities

# Adapting CBT for Children with Autism

### Repetition of salient concepts

 May need more or less repetition based on cognitive functioning

#### Multiple opportunities to practice concepts

 Provide specific feedback and reinforcement

#### Provide Examples and Sentence Stems

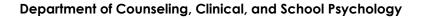
- Practice preceding tasks with clear example that student can mimic to be successful
- If using worksheets, include multiple choice lists and examples of core concepts
- Utilize video modeling activities

#### Parent Involvement

- Provide background information to inform target behaviors
- Important to help students generalize skills
- Help parents gain understanding of student strengths and needs
- Parents may serve as models

### **Modifying Role Plays**

- Role plays can be used to help students practice learned skills
- Model a similar scenario first
- Brainstorm possible responses before having student role play
  - Provide written suggestions for how to enact the role-play
- Allow for Pauses and Assign coaches
  - Peers make suggestions when they are stuck during role play



### **5 steps in CBT for Anxiety**



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### **CBT Roadmap for Children with Autism**

### Cognitive Conceptualization

- Identify key cognitions and behaviors to target
- Establish a relationship
- Develop goals
- Rules of the Game
  - Explicit instruction on reading social interactions and others' reactions & behaviors with accuracy
  - Teach self-acceptance
  - Teach compensatory strategies for those things that cannot be changed

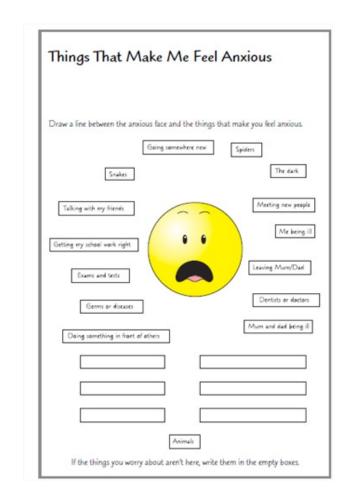
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Identify Cognitive Distortions

### Step 1: Psychoeducation & Emotional Awareness

### Psychoeducation

- Goal: To provide the child and families knowledge about various facets of the disorder and its treatment
- What is anxiety?
- What are signs of anxiety?
- What are triggers of anxiety?

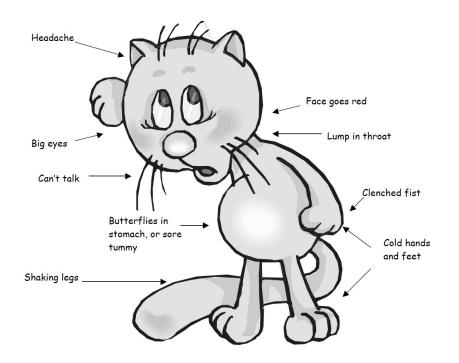


### **Explaining Anxiety**



## Signs of Anxiety

Chester the Cat feels anxious! How does Chester feel anxiety in his body?



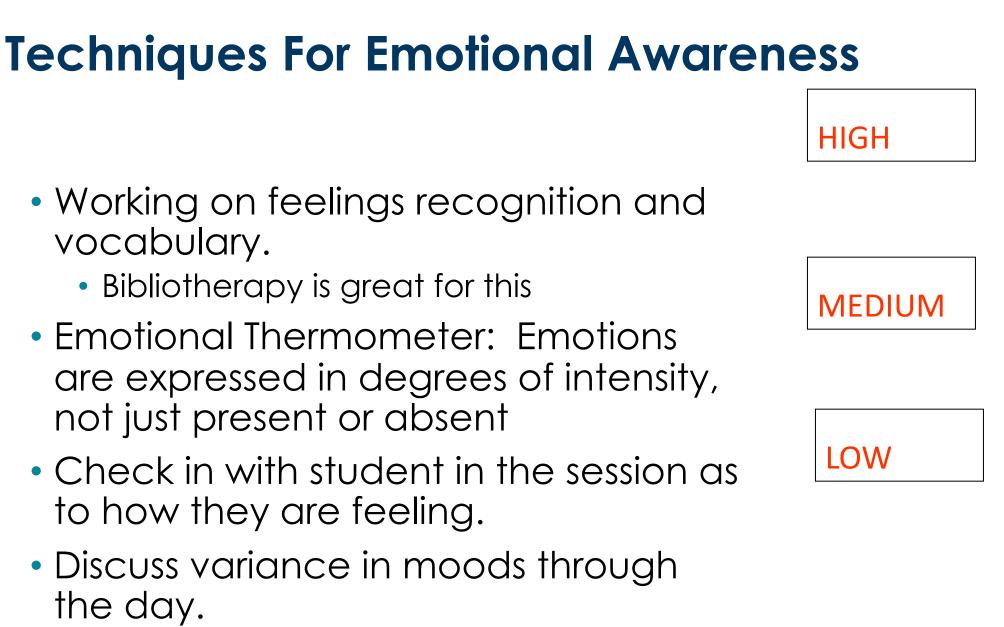
How do <u>YOU</u> feel anxiety in your body?

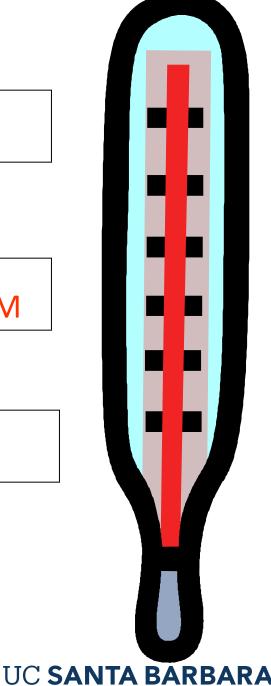


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### Develop Awareness of Emotional Variability

- Goal: To understand how thoughts, feelings, and behavior are interrelated. Increase awareness of emotions and emotional variability and how these states are linked to variability in thoughts and behaviors.
- Be consistent with language
- Need to explicitly teach emotional vocabulary and how to identify emotions in self and others





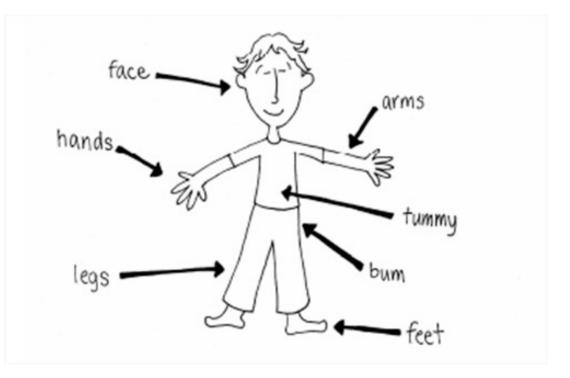
### **Step 2: Relaxation Strategies**

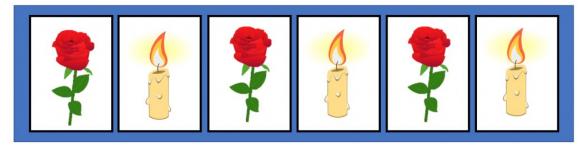
### Why Teach Relaxation Strategies

- Fear response can be reduced or inhibited through substituting an activity that is incompatible to it
- Relaxation and calmness responses are practiced in the gradually increasing presence of the feared stimuli
- Goal: To weaken the connection between stimuli and anxiety response

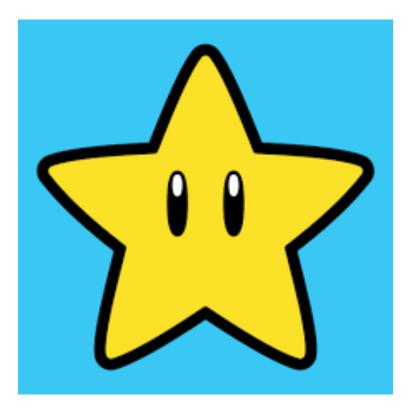
## **Relaxation Techniques**

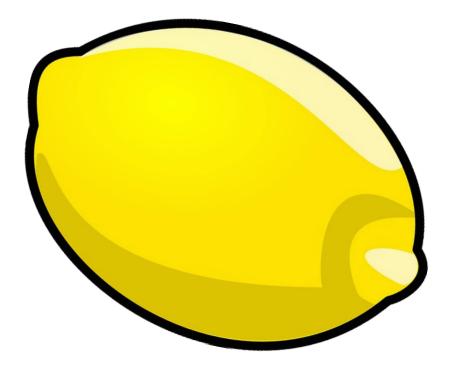
- Breathing exercises
  - Blowing Bubbles
  - Pair with Sensory Input (e.g., squeezes)
- Relaxing Activities
  - Sing a song / Play Music
  - Fidgets / Chew tubes
  - Weighted cushion / vest
  - Heavy Work
- Progressive muscle relaxation
- Guided Imagery / Meditation
- Modify the environment
  - Dim lights
- Consult with Student's OT for more suggestions





### Star Breathing & Lemon Squeeze







# **Step 3: Cognitive Restructuring**

### **Cornerstone of CBT**

- Our thoughts and attitudes, not external events, create our moods and feelings
- We do not have a feeling without a thought preceding that feeling
- Negative thinking patterns cause depression and anxiety

### THOUGHTS->FEELINGS->BEHAVIOR

# **Explaining CBT Triangle to Children**

- What did you notice?
- What worked well?
- How could you modify for students with Autism?
- <u>https://www.youtube.com/</u> watch?v=af04iwPN6vI



https://www.youtube.com/watch?v=gd65sMGERrU

#### Detecting Negative Automatic Thoughts and Identifying Core Beliefs

- Thoughts occur automatically in response to situations or stimuli, developing a pattern of thinking without having made a conscious decision to adopt that pattern.
- Persons who are anxious or depressed develop negative automatic thoughts which are distorted and unrealistic.

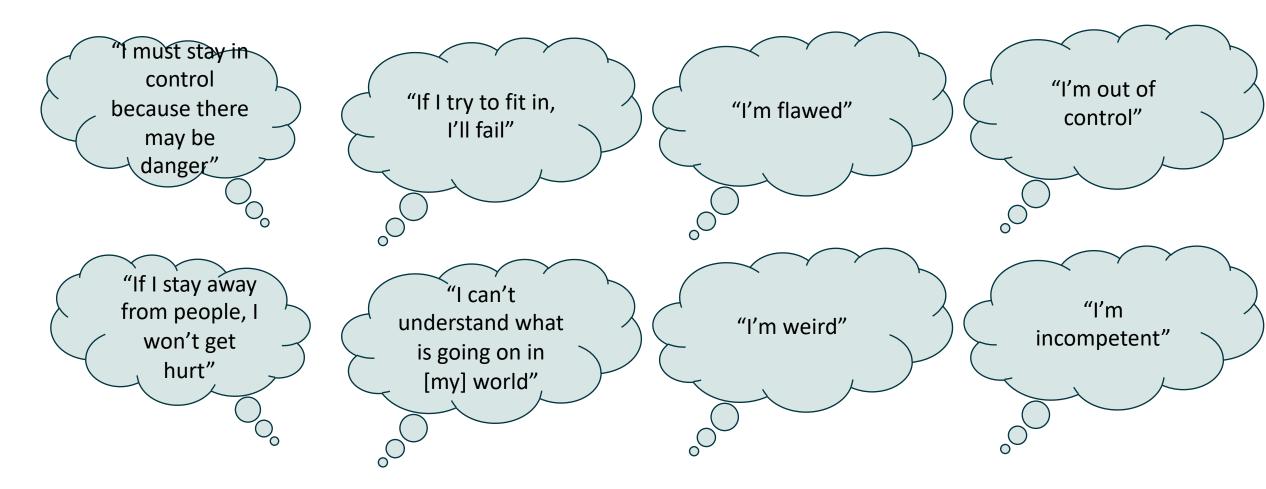
#### Thoughts vs. Beliefs

- Thoughts: Specific responses to particular events or experiences. (I am going to flunk this class).
- Beliefs: Schemas, or patterns, through which we interpret various situations. (I am stupid).

The negative thought and the mood are connected.



#### **Common Beliefs for Children with ASD**



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#### **Automatic Thoughts**

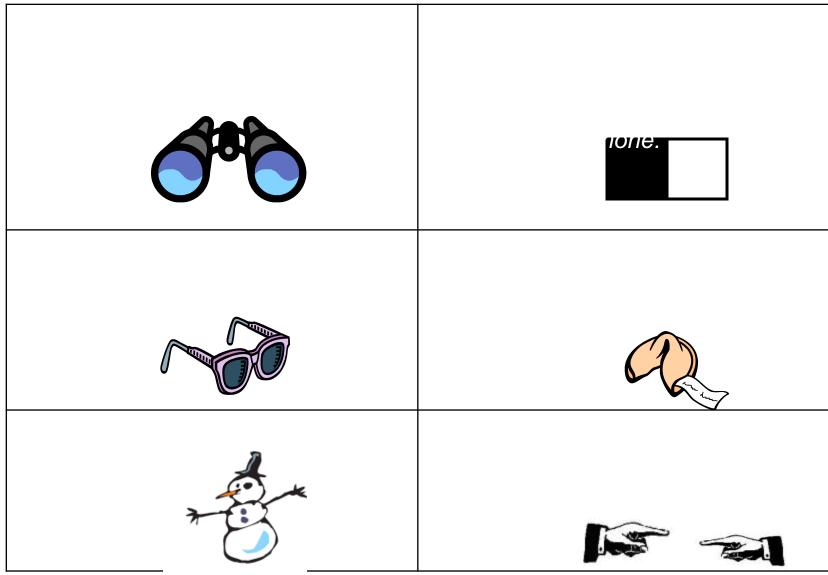
- The goal in Cognitive Therapy is to change maladaptive thinking patterns. One must first be aware of these automatic thoughts and underlying beliefs.
- Thought exercises can help a child think in different ways about the same situation.



### **Techniques for Detecting Automatic Thoughts**

- "Turn up the Volume" on your thoughts
- Down Arrow Technique
  - asking "what does that mean" questions to eventually get at underlying beliefs of client about self
- Thought Chart/Notebook/Journal Thoughts

## **Common Thinking Errors**



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#### **Evaluate Automatic Thoughts and Beliefs**

#### The 3 C's of Cognitive Therapy



Identify the thought that came before the emotion

heck Reflect on how accurate and useful the thought is







#### THINK GOOD – FEEL GOOD



#### Test your thoughts and beliefs

1 What is the negative belief/thought that you hear most often?

THOUGHTS

YOUR

CONTROLLING

- 2 Use the Thought Thermometer on page 87 to rate how strongly you believe this thought.
- 3 What experiment could you set up to test whether this is true?
- 4 When will you carry out your test?
- 5 If your belief/thought was true, what do you predict would happen?

6 What did happen?

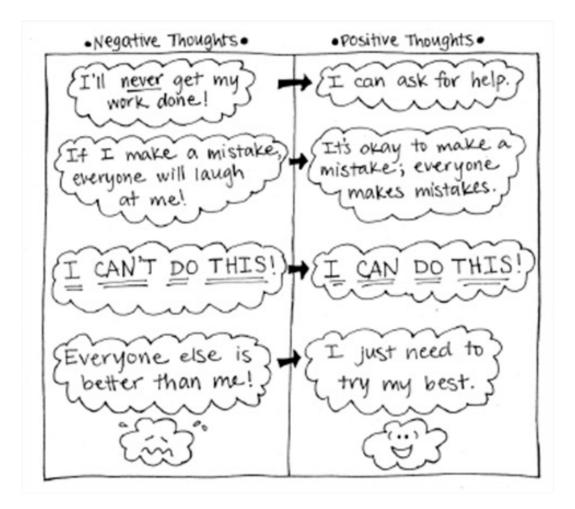
**7** Use the Thought Thermometer to rate how strongly you now believe this thought.

Stallard (2002) UC SANTA BARBARA

#### **Thought Replacement**

 Goal: To eliminate or reduce unrealistic negative thoughts and modify maladaptive underlying beliefs through replacing these thoughts with more realistic adaptive thinking.

### **Cultivating Positive Thoughts**





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## Techniques, cont.

- Reframing and Relabeling: re-label negative thought as a more healthy label/healthy thought
- Cognitive Rehearsal: To rehearse appropriate and adaptive thoughts and beliefs
  - Roleplays
  - Thinking aloud
  - Puppet play
  - Bibliotherapy

# Situation: You want to invite your new friend to your party.



		Thoughts	Feelings	Behaviors	
	Worried				
:al,	Calm				

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# Step 4: Exposure Therapy

#### **Development of Anxiety Hierarchy**

- Make a list of specific situations within the student's targeted area of fear/anxiety
- Have student rate each situation on a visual rating scale of how much fear/anxiety it causes
- Cards are ordered from least to most





#### **Desensitization / Graded Exposure**

- Systematic exposure to the feared stimuli with the combination of the relaxation techniques
- Imaginal: imagine the feared situation, then have student use relaxation. Once relaxation has been attained, repeat this process until imagery happens with full relaxation
- In vivo: gradually exposed to the actual stimuli



- To reduce anxiety and fear responses by having students observe other individuals who deal appropriately with the anxiety provoking stimuli
  - Can be live or "symbolic" (e.g., through video or photo)
- Allow child to observe interacting with the feared stimulus in a non-fearful manner

#### **Positive Self Talk and Anxiety**

Positive self statements can help child feel more positive and self assured in a variety of situations.

Begin with child stating these out loud, then move to internal talk





#### **Differential Positive Reinforcement**

- Differential reinforcement of behaviors which are incompatible with the anxiety response
- Example: for child who is afraid of using the school restroom, begin to reinforce the use of public restrooms



# **Contingency Management**

- Shaping: reinforcing successive approximations toward the goal
- Positive reinforcement: charts and reinforcement of accomplishments (e.g., game board set up; looking at a book of pics with a dog, in room with dog, petting dog, etc.)

# **Step 5: Relapse Prevention**

#### **Strategies for Relapse Prevention**

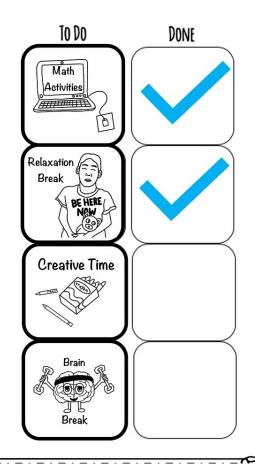
- Parent involvement is an important component to help maintain progress
- Provide student with concrete resources at the conclusion of treatment
  - Resource, such as a book, that consolidates skills and serves as a reference for potential future anxious episodes

#### **Other Considerations**

### Have a Predictable Schedule

- Check-In
- Review Tasks from Previous Week
- My Turn: Main Activity & Discussion
- Your Turn: Child-led activity
- Review Weekly To-Do Task
- Reinforcers & Goodbye





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#### **Explicit Instruction of Reading Social Interactions**

Teach Skill	<ul> <li>Let the child know specifically what to say and/or do in given social situation</li> <li>Use short, simple, concrete language &amp; pictures</li> </ul>
Model	• Show examples of others performing behavioral steps competently
Role Play	<ul> <li>Children rehearse/practice learned skills</li> <li>Provide visual display of skill steps</li> <li>Assign Coach</li> </ul>
Performance Feedback	<ul> <li>Receive feedback from peers &amp; therapist</li> <li>Suggestions for improvement, prompts, rewards &amp; praise</li> </ul>
Transfer Training	<ul> <li>Procedure to enhance likelihood that skills will be used in real-life situations</li> </ul>

#### **Social Problem Solving**



STOP! Be Cool Take a deep breath Count to 10 What's the problem?

Think of a Plan What are your choices? What are the consequences? Choose the best choice

**Try it Out** Did it work? **STOP.** What is your problem? **PLAN.** What is your solution? GO. When will you try it out?

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# **Social Problem Solving**

- Use comic scripts or stories to practice problem solving steps
- Use role plays to practice



#### Progress Monitoring: Specific Internalizing Self-Report Instruments

- Revised Children's Manifest Anxiety Scale (RCMAS)
- State-Trait Anxiety Inventory for Children (STAIC)
- Multidimensional Anxiety Scale for Children (MASC)
- Beck Anxiety Inventory (BAI)
- The Revised Child Anxiety and Depression Scale (RCADS)
- Screen for Child Anxiety Related Disorder (SCARED)
- Spence Children's Anxiety Scale (SCAS)

#### Sample Modified CBT Programs

#### Facing Your Fears: Group Therapy for Managing Anxiety in Children with High Functioning ASD (FTF-A)

- Modified CBT Intervention for children and adolescents with Autism
- 4-5 youth per group
- 90 minute sessions
- 14 sessions, one booster 4-6 weeks post-treatment
- Ages 8-14 years
- Can be modified for 1:1 therapy
- Basic Elements of Traditional CBT
  - Psychoeducation
  - Strategies for Cognitive Self-Control: Cognitive restructuring
  - Somatic Management
  - Strategies for Emotion Regulation: relaxations training
  - Graded Exposure: Creation and completion of a hierarchy of behavioral exposures to previously avoided situations
- Modifications Included:
  - (1) a social skills module to address areas of social challenge;
  - (2) parent-teen dyadic work focused on achieving a mutual understanding and shared goals;
  - (3) the use of technology to both monitor symptoms of anxiety and remind participants to utilize CBT strategies; and
  - (4) a parent curriculum.
- Learn More Here

#### Sample Evidence Base Program: Secret Agent Society: Operation Regulation (SAS: OR)

- Modification of Secret Agent Society (Beaumont et al., 2015)
- Spy-themed manualized tCBT program focused on emotion regulation and social skills
- Ages 8-13 years
- 10 sessions
- What's the Same
  - Spy theme
  - Materials (e.g., Code Cards, Video Game), Activities (e.g., emotion education, in vivo practice; homework review / planning)
  - High degree of visuals
- What's Different
  - Omits social skills curriculum
  - Activities to improve emotion regulation (e.g., systematic exposure, mindfulness & acceptance activities)
  - Individualized to participant interests
- Sessions Include
  - Education
  - In vivo practice of skills
  - Planning for challenges at home and school
  - Positive Reinforcement
  - Parents participate throughout session
- Learn More Here



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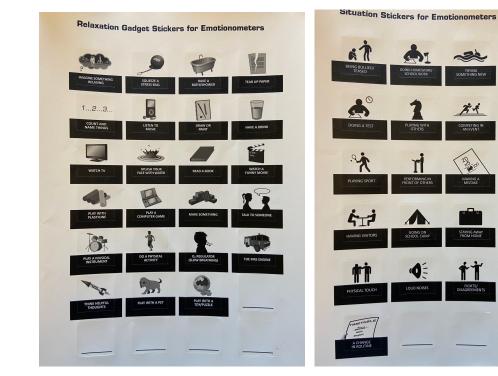
## **Secret Agent Society Materials**

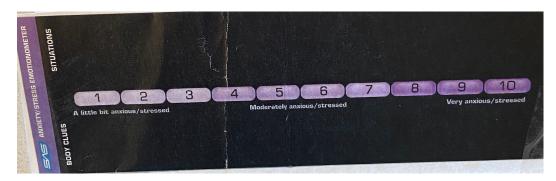
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GOING TO A BIRTHDAY PARTY

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TROUBLE





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