Understanding and Addressing Emotional Problems for Children with ASD through a Cognitive Behavioral Approach

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Is mental health something that students and staff can hang up at the school house door?

SAMHSA's Center for Mental Health Services:

"Mental health is defined as……

"how a person **thinks, feels, and acts** when faced with life's situations…. This includes handling stress, relating to other people, being able to concentrate, and making decisions."

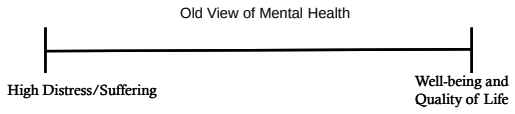
Mental Health and Mental Illness Defined

Mental *Health* or Mental *illness?*

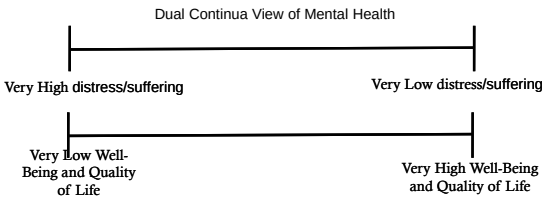
When many people hear the term mental *health*, they think mental *illness.*

Is this correct?

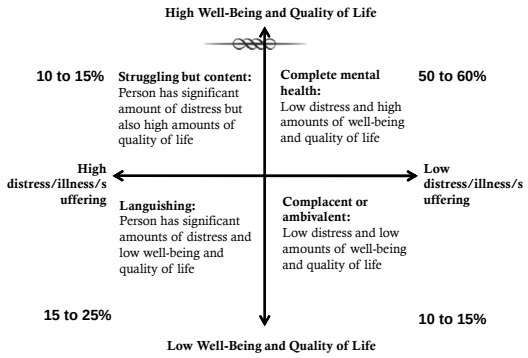
Old View of Mental Health



Modern View of Mental Health
Dual Continua of Mental Health



Breakdown of the Dual Continua of Mental Health



Mental Health Defined

SAMHSA's Center for Mental Health Services:

"Mental health is defined as "how a person thinks, feels, and acts when faced with life's situations.... This includes handling stress, relating to other people, and making decisions." This is contrasted with mental health problems and disorders. (The term mental *illness* is reserved for severe mental health problems in adults).

Resilience Defined

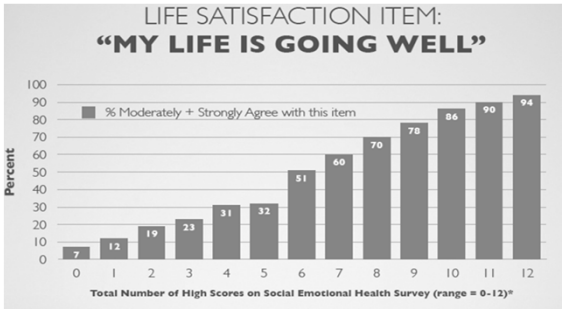
- **Resilience:** the ability to survive and thrive in the face of life's daily ups and downs, curve balls, and stressors.

- **Survive:**
  - Navigate stressful situations successfully
  - Bounce back after a challenging, adverse situation
  - Minimize life suffering
- **Thrive:**
  - Ability to flourish in life
  - Optimize well-being and life satisfaction
  - Be as effective as possible in everything you do

All Children are Capable of Becoming Resilient with…….

- Resilience does not require something rare or special—it's ***ordinary magic.***

Number of Resilience Factors and Life Satisfaction



Ingredients to becoming healthy, happy & resilient person

- Developing helpful and optimistic thinking
- Seeking "good" social support
- Good sleep
- Clarifying values and doing what matters most
- Management of intense negative emotions
- Regular exercise
- Role models
- Mindfulness-based practices
- Problem-solving skills
- Purposefully practicing gratitude
- Grit and perseverance
- Scheduling time for recreation and relaxation
- Receiving mentoring
- Cultivating positive emotions
- Healthy, balanced diet

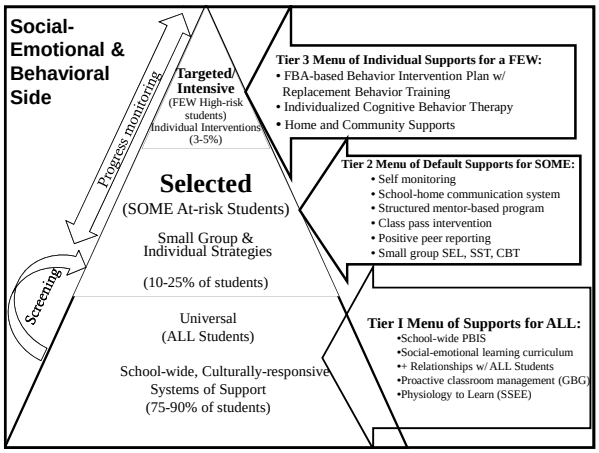
Recipe For Life

Mental Health Problems: The Numbers

- 20 to 30% of students have a diagnosable mental health disorder
- When referred to agencies outside of the school, only 10 to 15% of the children who need MH services get them
  - Versus, when MH services are provided to the school, over 90% of referred student receive them

What is needed…..

- Whole-child approach to promote student success and wellbeing
  - Academics – Mental Health – Physical Health
- Multi-tiered system of supports (i.e., continuum of supports)
- Integrated approach to prevention (broad-spectrum)
  - Not a program for every problem
- Positive school climate in which students feel a sense of belonging and purpose



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Universal Screening

- Process of ***proactively detecting*** a subset of students from the entire student population who are struggling academically/behaviorally, are at-risk for experiencing a range of negative short- and long-term outcomes, and therefore, in need of intervention

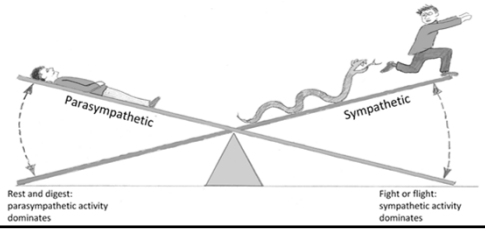
Screening Tools

- Social/Emotional/Behavior
  - Review360 (Student internalizing behavior screener & Student externalizing behavior screener)
  - Student Risk Screening Scale (Externalizing & Internalizing)
  - Social, Academic, Emotional Behavior Risk Screener (SAEBRS; FBL)
  - Systematic Screener for Behavioral Disorders (SSBD)
  - Behavior and Emotional Screening Scale (BASC)
  - Youth Internalizing & Externalizing Problem Screeners (YIPS & YEPS)
  - Brief Externalizing and Internalizing Screener for Youth (BEISY)
  - Social Skills Improvement System – Screener (SSIS-S)
  - Strengths and Difficulties Questionnaire
  - DESSA-Mini

Understanding Mental Health and When Problems Emerge

Definitions

- **Homeostatic balance** (a state of **homeostasis**): having an ideal body temperature, an ideal level of glucose in the bloodstream, an ideal everything
- **Stressor**: anything that knocks you out of homeostatic balance



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Why Don't Zebras Get Ulcers?

Perceived and Actual Non-Life-threatening Stressors

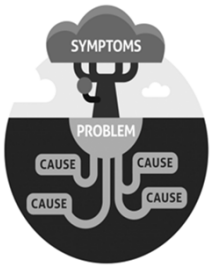
- Stress is an unavoidable fact of life.
- However, for humans the vast majority of stressors are not life threatening in any way.
- Unfortunately, humans can generate stress by anticipating it—whether or not it occurs, and whether or not it's merited.
- We don't have to experience something to be stressed out by it (perceived stressors).

When Stress Becomes Too Much

- **Allostatic load:** the wear and tear on the mind and body that results from either too much stress or inefficient management of stress.
- Not turning off the stress response when it is no longer needed
- Response to perceived stressors that never even happen
- Inability to manage the intensity of stressors in the moment

Root Causes for Mental Health Problems

- **Unhelpful ways of thinking** in responses to situations or about self, future and world
- **Emotional dysregulation** occurs when feelings overwhelm cognitive system
- **Learned maladaptive behaviors/choices** in response to school and life circumstances



Negative Impact of High Allostatic Load

On our body:
- Headache
- Muscle tension or pain
- Cardiovascular
- Fatigue
- Change in sex drive
- Stomach upset
- Sleep problems

On our mind:
- Anxiety
- Restlessness
- Lack of motivation
- Memory problems
- Irritability or anger
- Sadness or depression

On our behavior:
- Angry outbursts
- Avoidance of important activities
- Overeating or undereating
- Social withdrawal
- Drug or alcohol abuse

Cognitive Fusion

- Fusion is the idea that thoughts are inextricably linked to emotions and behavior
- Thoughts dictate and command actions

People are Meaning Making Machines

- Meaning making
  - Events or situations happen and we attempt to interpret what the event or situation means
- The meaning we make out of situations is what makes us feel good, bad, or indifferent
  - I buy my wife flowers and she thinks "he loves me or boy I've got him whipped"
  - My wife cheats on me and I interpret "my life is over"

Impairment as the defining characteristic of a disorder

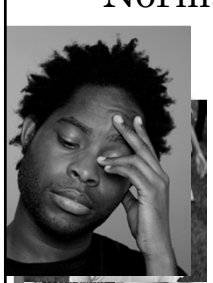
- Amount of ***impairment*** determines when a problem becomes a disorder and whether services or supports are warranted
  - Areas of impairment
    - Social,
    - Emotional,
    - Academic,
    - Vocational,
    - Self-care domains

Intense Emotions Make People Stupid

- Being highly emotional is generally incompatible with being rational or logical (i.e., poor decisions & regrettable behaviors)
- People do silly, stupid and potentially harmful things under the influence of emotions
  - For the sake of love
  - Road rage
  - Drink a little too much with friends
  - Hurt one's self or others when upset

vs.

Normal to Impairing



Worry/anxious

Does the emotional reaction fit the situation??????

Who are we dealing with?

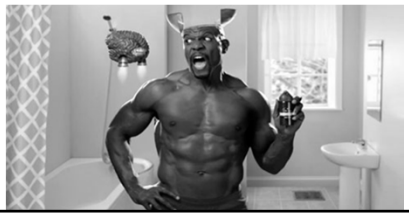
Upstairs & Downstairs Brain

PREFRONTAL CORTEX
- Logic
- Planning
- Self-regulation
- Weighing consequences
- Suppress urges
- Thinking into the future

LIMBIC SYSTEM
- Emotional drive
- Pleasure seeking
- Mood swings
- Gut feelings
- Response to rewards (eat/sex)

The Amygdala Hijack

- A term coined to describe the process of losing rational, logical thinking when becoming emotionally upset
  - The amygdala takes over dominates thinking and behavior and essentially interferes with prefrontal cortex functioning (e.g., self-regulation, weighing consequences, thinking clearly)



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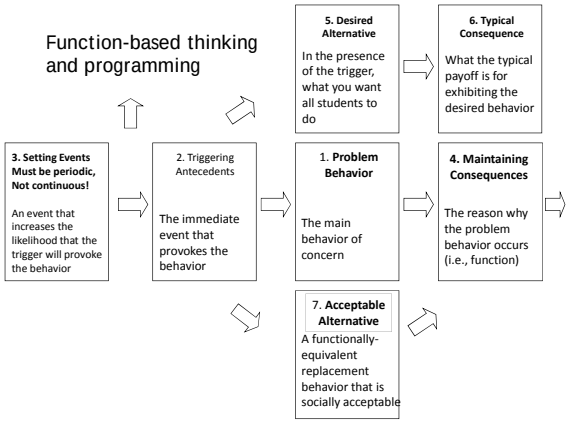
Maladaptive Behavior/Choices

- Unskillful behaviors that a person has learned and exhibits to get needs met
  - Utilizing aggressive behavior to get another person to stop something one doesn't like (avoidance of aversive interaction)
  - Inappropriate behaviors to instigate interactions with peers to gain attention



Commonalities Across the Emotional Disabilities

- Thoughts
  - Irrational beliefs
  - Faulty automatic thoughts
  - Attentional biases
- Emotional responses
  - anxiety, depression, anger, emotional dysregulation
- Behavioral responses
  - Avoidance behaviors
  - Oppositional behaviors
  - Aggressive behaviors
  - Poor coping strategies
- Physiological/Somatic responses
  - Accelerated heart rate
  - Flushed face
  - Shortness of breath

The Emotional Problems

- Anger
- Anxiety
- Obsessive/compulsive
- Depression
- Trauma
- Eating Disorders
- Insomnia

What Is Evidence-Based?

- Evidence-based knowledge is:
  - Objective
  - Rules out alternative explanations
  - Involves direct measurement
  - **Independent replication by investigator who does not have a conflict of interest**
- Provides one with confidence that the intervention actually works

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What Should We Be Doing For: Depression

Best Support

- **CBT**
- Interpersonal Therapy
- CBT and Medication

David-Ferndon & Kaslow, 2008

Good Support

- Behavioral Activation
- Client Centered Therapy
- Cognitive Behavior Therapy with Parents
- Play Therapy
- Relaxation

What Should We Be Doing For: Anxiety

Best Support

- **CBT**
  - **Education**
  - **Exposure**
  - **Response Prevention**
  - **Modeling**

Good Support

- Assertiveness Training
- Cognitive Behavior Therapy and Medication
- Cognitive Behavior Therapy with Parents
- Hypnosis
- Play Therapy
- Relaxation

Silverman, Pina, & Viswesvaran, 2008

What Should We Be Doing For: Trauma

Best Support

- **CBT with prolonged exposure**

Good Support

- Cognitive Behavior Therapy with Parents
- Play Therapy

Cohen, Deblinger, Mannarino & Steer (2004);

DeArrellano, Waldrop, Deblinger, Cohen, & Danielson (2005)

What Should We Be Doing For: Conduct

Best Support

- **CBT-Anger Control**
- Parent Management Training
- PCIT
- Group Assertiveness Training
- Contingency Management
- Multisystemic Therapy
- Multidimensional Treatment Foster Care

Good Support

- Client Centered Therapy
- Communication Skills
- Functional Family Therapy
- Parent Management Training and Problem Solving
- Physical Exercise
- Problem Solving
- Rational Emotive Therapy
- Relaxation
- Social Skills
- Transactional Analysis

Eyberg, Nelson, & Boggs, 2008

What Should We Be Doing For: Attention

Best Support

- Contingency Management
- Parent Management Training
- Self Verbalization
- Behavior Therapy and Medication

Good Support

- Contingency Management
- Education
- Management Training and Problem Solving
- Physical Exercise
- Relaxation and Physical Exercise
- Social Skills and Medication

Jensen et al., (2001); Pelham & Fabiano, (2008)

Newest NPDC Report Findings

(Literature review 1997–2011)

- 27 EBPs as compared to 24 EBPs identified in the previous review
- Six new EBP categories:
  1. Cognitive Behavior Interventions
  2. Exercise
  3. Modeling
  4. Scripting
  5. Structured play groups
  6. Technology-Aided Instruction and Intervention

Applicable Populations / Grade Levels

According to the NPDC March 2014 report evidence-based studies, this intervention has been effective for:

- elementary school-age learners (6-11 years)

  to

- high school-age learners (15-18 years) with ASD

Resources to Find Evidence-Based Interventions

- ABCT:

  http://www.abct.org/sccap/?m=sPro&fa=sPro

- NREPP:

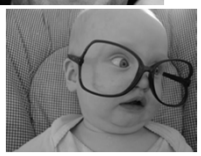
  http://www.nrepp.samhsa.gov/

- Promising Practices Network

  http://www.promisingpractices.net

- What Works Clearinghouse: http://ies.ed.gov/ncee/wwc/

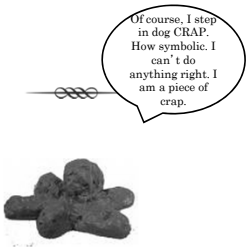
It's all about the **LENS** through which one interprets situations



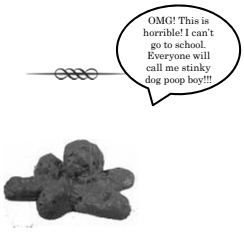
Typical child

Darn it! I stepped in dog poop. I better clean it off so I can go to school.

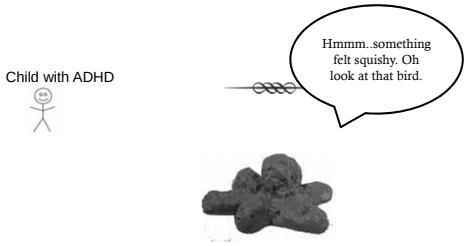
Depressed child



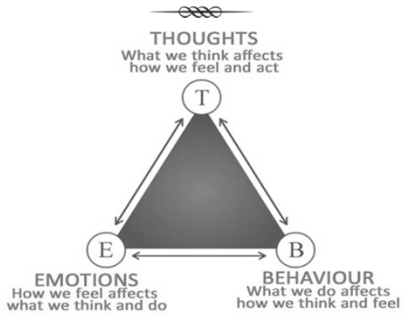
Anxious child



Aggressive child



What is Cognitive Behavioral Therapy?



Putting the CBT Model All Together

Situation: Going to school

↓

Thoughts &
Meaning Making: "I hate school. Nobody likes me and people make fun of me"

↓

Reaction
(Emotional, Behavioral and Physiological):
Butterflies in belly, tensing of body, feeling stressed and anxious, tantrums and refused to go

↓

Consequences
(Perceived and actual): Avoid going to school and stay home & access fun activities

The Cognitive Behavioral Model

CBT STRATEGIES

Situation — Awareness of triggers & exposure activities

↓

Thoughts & Meaning Making — Cognitive restructuring (helpful vs. unhelpful thoughts)

↓

Reaction (Emotional, Behavioral and Physiological) — Teaching skills: relaxation, coping, problem-solving

↓

Consequences (Perceived and actual) — Contingency management & reactive strategies

Unified Protocol of CBT: *The Most Important Slides*

1. **Psychoeducation:** normalize, externalize, and elucidate a goal
2. **Awareness:** understanding of emotion-provoking triggers and reactions to those triggers
3. **Emotion Regulation:** Teaching relaxation, distraction, positive self-statements, and mindfulness skills

Unified Protocol of CBT: *The Most Important Slide*

4. **Cognitive Restructuring:** recognizing/noticing unhelpful thoughts and altering/repurposing them to be more helpful
5. **Problem-solving:** Teaching more skillful behaviors in response roblem-solving and social skills
6. **Putting it all into Action:** Developing a plan and confronting emotion-provoking situations (exposure or behavioral activation)

CBT Basics

- Homework is a critical component of CBT to practice learned skills and increase their generalization beyond the sessions
- **Antecedent and consequent strategies** are utilized to support the student's use of learn skills and behaviors, as well as prevent and effectively respond to problem behavior
- Coordination beyond the therapy session is critical for success

ESTABLISH RAPPORT

WITHOUT IT, CBT WON'T WORK!

Rapport/Therapeutic Relationship

- What are the tricks of the trade to effectively establish rapport?
- What has been successful for you to win over a particularly resistant or difficult student, parent, or teacher?

Rapport Tactics

- Provide choice of an activity
- Present yourself as someone who is different than the other adults in the child's life
  - Curse, seem goofy/silly, use humor, do something unexpected that doesn't conform to typical rules
- Learn about "kid culture" and the client's specific interests
- Do something special (reciprocity)
- Bring the student something good for lunch
- Use of open-ended questions to validate and provide empathy statements
- Do a home visit to learn about the student and family
- Indirect complement

CBT Step 1: **Psychoeducation**

1. **Educate, Normalize, Externalize, & Elucidate a Goal**
   - Educate the child about the emotion and how it manifests and impacts a person
   - Normalize that emotions are normal, but it's important to not let emotions get the best of us
   - Externalize the emotion as something the child has to manage and compete against
   - Elucidate a goal

Life Bus Metaphor

Externalizing the Problem

CBT Step 2

- **Raising awareness** of emotion-provoking triggers and cognitive, emotional, and physiological reactions to those triggers

Abundant Awareness of Triggers/Buttons

- Child must fully understand the conditions or social situations under which s/he is likely to experience the problem (anger, anxiety, sadness, distress)
  - Figuring out the child's buttons
- Trigger/button categories:
  - People
  - Activities
  - Directions/instructions
  - Routine changes

Rockslide metaphor to understand triggers and when emotions are getting out of control

CBT Step 3

- Teaching relaxation, distraction, self-soothing, mindfulness and positive self-talk as emotion regulation and coping skills

Why teach relaxation?

- Relaxation is incompatible with being emotionally aroused and upset
  - Can't be relaxed and angry/upset/anxious at the same time
- After practicing relaxation we often forget about what we were stressed/worried/angry about
- Relaxation strategies:
  - Visual imagery through 5 senses
  - Progressive muscle relaxation
  - Deep breathing exercise & visualization

Distraction Tactics

- Engaging in an alternative activity to get one's mind off of the trigger/button OR prevent the downward spiral
- About pulling one's mind off of the emotion and on to something else
  - Cognitive distraction
    - Soduko, crossword puzzle, read a book, listen to music
  - Behavioral distraction
    - Exert physical energy, opposite behavior
  - Physiological distraction
    - Ice in hand, drink cold water, warm water on face

Mindfulness Molecule

Purposeful Awareness

Mindfulness

Intentionality/ Agency

Receptive Attitude

CBT Step 4

- Cognitive restructuring skills
  - Recognizing and altering unhelpful thoughts to be more helpful & optimistic

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Let's Begin

- You are Not Your Thoughts!
- You are the awareness that is capable of noticing not only the thoughts you are having, but what you are seeing, tasting, feeling, and hearing.

Key Term

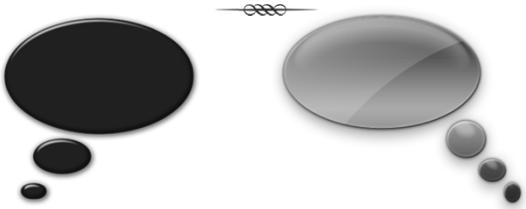
- Metacognition

Unhelpful versus Helpful Cognitive Content Automatic Thoughts and Core Beliefs

- **Unhelpful** automatic thoughts and core beliefs: those thoughts and/or beliefs that are self-defeating and increase the likelihood one will engage in regrettable, ineffective or otherwise problematic behaviors
- **Helpful** automatic thoughts and core beliefs: those self-helping thoughts and/or core beliefs that increase the likelihood one will engage in values-based, effective or otherwise positive responses

Helpful Thinking

Red Thoughts vs. Green Thoughts



- Identify red thoughts and practice turning them into green thoughts.
- Find the most common red thoughts and develop a script of green thoughts.

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Detective Thinking: Questioning and Challenging Unhelpful Thoughts

Investigate your thoughts and ask yourself these questions:

- Am I the thoughts that are going through my head, or am I the awareness that is capable of noticing the thoughts that are going mind?
- What are the likely pros and cons of telling myself this thought is 100% true? Are these outcomes really in the best interest of myself and others?
- What advice would I tell ___ (a friend/family member/ colleague) who is asking for a more helpful way to view this situation?
- How might someone who is not emotionally involved think?
- Do I have to let these thoughts dictate my behavior or can I choose to engage in the behavior that is most effective or meaningful given the situation?

CBT Step 5

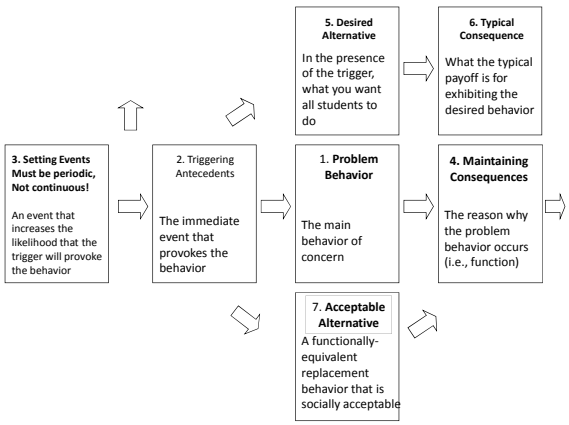
- **Developing problem solving plans to develop adaptive behaviors in response to emotion-provoking situations and teaching other general behavioral skills**

SODAS Technique

- **S**ituation
  - What is the problem?
- **O**ptions
  - What are my options to solve the problem?
- **D**isadvantages
  - What are the disadvantages associated with each option?
- **A**dvantages
  - What are the advantages associated with each option?
- **S**elect the best option
  - Pick an option and evaluate whether it solved the problem

Problem-Solving All Scenarios

- Develop SODAS for the main situations or triggers
  - Process this information with the child when the "upstairs" brain is working
- Develop problem-solving cheat sheets to give to the parent, teacher, and other adults who can help remind the child when "in the heat of the moment"



Social Skills: GIVE

- **G**entle with your communication
- Act **I**nterested
  - Nodding, asking questions, non-verbal behavior
- **V**alidate the other person's
  - Understand feelings and demonstrate empathy
- **E**asy manner
  - Calm, respect personal space, be aware

CBT Step 6

- Developing a plan and putting it to action
  - Exposure and/or therapeutic action planning

FIGHT Plan:

Fight back the emotion—not yourself or others

- **F**eeling upset? (emotion, buttons, & reactions)
- **I**nner helpful thoughts (common unhelpful thoughts & positive thoughts/self-statements)
- **G**etting to calm (relaxation & distraction)
- **H**ow are you doing? (check in & self-rating)
- **T**ake time to reflect and reward yourself (repeat steps or reward self)

Develop a wallet sized card with the FIGHT Plan

FIGHT PLAN	
Feeling Upset?	**Emotion**: Sadness & Anger **Buttons**: Teased by peers, ignored by others **Reactions**: Fast breathing, rapid heart rate, exhaustion, withdrawal from others
Inner helpful thoughts	**Unhelpful thoughts:** "Nobody likes me." "I hate people." "School sucks." **Positive self-statements:** "Words are just sounds." "Not everybody has to like me and I don't have to like everybody." "I'm good at school and I want a better life."
Getting to calm	**Relaxation:** Deep breathing (focus on slow rhythmic breathing. Think about my happy spot. **Distraction:** Play a cards; watch youtube video **Tapping into my senses:** Accessing chill spot
How am I doing?	**Rating:** On a scale of 1 to 10, 1 = not well at all to 10 = I'm doing awesome.
Take time to reflect and reward self	Did you make it through the situation? Be proud of yourself and share success with someone else

Anxiety/OCD/Anger/Trauma

- **Exposure**
  - Start with least scary/frustrating thing
  - Gradually increase to more scary/frustrating thing
  - Rate anxiety prior to actual exposure
  - Rate anxiety following exposure
  - Evaluate the outcome of the exposure

Exposure Activities

- **Imaginal**
- **Analogue (in the office or contrived situations)**
- **In vivo (real situations)**
- **Interoceptive**
  - **(artificially creating physiological symptoms)**

Adaptations for Students w/ASD

- ***Traditional CBT/I tends to require strong linguistic and abstract thinking abilities*** and these can be a challenge for individuals with ASD.
- Researchers have been developing modifications to make it more effective with individuals with an ASD by making it better suited to the learning styles of individuals with ASD, for example, by ***making it more repetitive, visual, and concrete***.

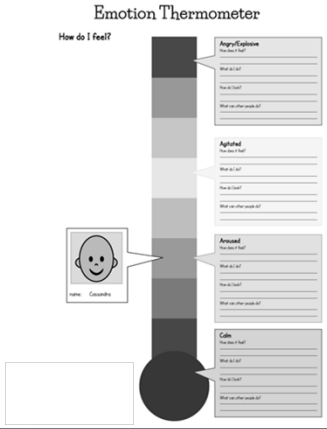
Adaptations
Incorporate Visuals

- Instead of just asking the individual with ASD to verbally rate their anxiety on a scale of 1 to 10, the interventionist might use the **EBPs of Visual Support and Self-Management**

  Emotion Thermometer

  Incredible 5 Point Scale

- Individual points to show how high their anxiety is around a certain situation



Decrease Verbal Demands
Use EBP: Visual Support/Schedules

For example:

1. Provide a written or graphic weekly agenda showing when each session will occur and….

2. Provide detailed structure of *each* session allows the individual with ASD to predict activities and breaks throughout the session.

EBP: Special Interests

- Incorporating the **EBP of Special Interests** in the sessions to motivate individual to engage in treatment activities. For example,
  - Using favorite cartoon characters to model coping skills
  - Or interspersing conversations about their special interest throughout treatment sessions to promote motivation and engagement.

Special Interests

Include Social Narratives/Social Stories/ Social Skills Training/Video Modeling

Gives the individual increased skills to be socially successful because….

….. the core social deficits of individual's with ASD contribute to the experience of anxiety, which then serves to intensify the social problems.

EBP
Social Narrative/Social Story

Social Narratives
Fact Sheet

Brief Description

Social narratives (SN) are interventions that describe social situations in some detail by highlighting relevant cues and offering examples of appropriate responding. They are aimed at helping learners adjust to changes in routine and adapt their behaviors based on the social and physical cues of a situation, or to teach specific social skills or behaviors. Social narratives are individualized according to learner needs and typically are quite short, perhaps including pictures or other visual aids. Usually written in first person from the perspective of the learner, social narratives include sentences that detail the situation, provide suggestions for appropriate learner responses, and describe the thoughts and feelings of other people involved in the situation.

Qualifying Evidence

SN meets evidence-based criteria with 17 single case design studies.

Ages

According to the evidence-based studies, this intervention has been effective for preschoolers (3-5 years) to high school-age learners (15-18 years) with ASD.

Outcomes

SN can be used effectively to address social, communication, behavior, joint attention, play, school-readiness, academic, and adaptive skills.

Research Studies Providing Evidence

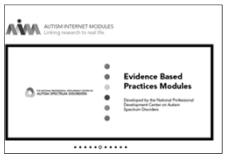
Barry, L. M., & Burlew, S. B. (2004). Using social stories to teach choice and play skills to children with autism. *Focus on Autism and Other Developmental Disabilities*, *19*(1), 45-51.
doi: 10.1177/10883576040190010601

Bock, M. A. (2007). The impact of social behavioral learning strategy training on the social interaction skills of four students with Asperger syndrome. *Focus on Autism and Other Developmental Disabilities*, *22*(2), 88-99. doi: 10.1177/10883576070220020901

Campbell, A., & Tincani, M. (2011). The power card strategy: Strength-based intervention to increase direction following of children with autism spectrum disorder. *Journal of Positive Behavior Interventions*, *13*(4), 240-249. doi: 10.1177/1098300711409608

Chan, J. M., & O'Reilly, M. F. (2008). *A Social Stories™ intervention package for students with autism in inclusive classroom settings. Journal of Applied Behavior Analysis*, *41*(3), 405-409.
doi: 10.1901/jaba.2008.41-405

Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder



Incorporate Peers

EBP: Peer Mediated Instruction and Intervention

Incorporating natural supports of peers since the core deficit area is social communication and interaction and subsequent lack of friendships….

Include EBP: Reinforcement

Including the **EBP of Reinforcement helps** to keep the individual with ASD motivated and engaged.