

Coping with anxiety

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What is Autism?

**Autism is a heterogeneous neurodevelopmental disorder characterized by core deficits in social interaction and communication that profoundly influence an individual's development into adulthood.
(Howlin, 1997)**

**Diagnosis and intervention is
complicated by the
heterogeneity of ASD's**

The Autism Spectrum Disorders defy generalization

- Wide variability in symptoms and severity
- IQ varies from significantly below to significantly above average
- Affects 3-4 males to 1 female
- A variety of skills domains can be affected with concurrent psychiatric, medical, motor and speech impairments
- Autism can be detected by 12 months, but the average age of diagnosis is much later
- As a result diagnosis and intervention are challenging and demand an interdisciplinary and individualized approach

Best practice intervention approach

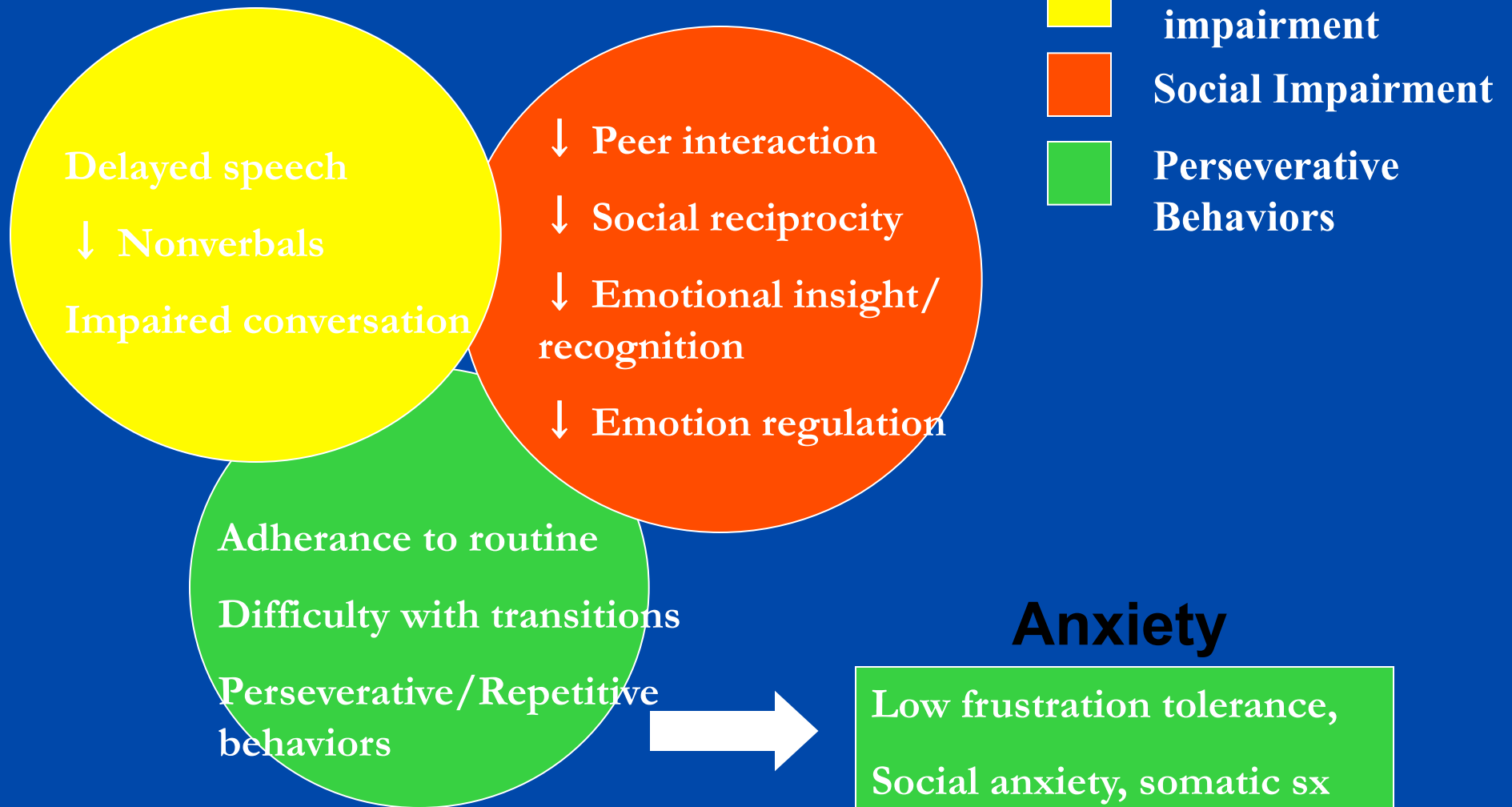
- **Intervention addressing ASD symptoms and potential co-occurring disorders; medical and psychiatric conditions**
- **Intervention for developmental, cognitive and adaptive skills**

Treatment should be interdisciplinary and individualized

- **Medical needs**
 - Metabolic/genetic conditions (10-20%)
 - Seizures (20-30% with bi-modal onset)
 - Sleep disorders
 - GI problems
 - Allergies
- **Co-morbid psychiatric conditions (50-60% psychotropic meds)**
- **Psychosocial/behavioral needs (e.g., social skills, behavioral management, individual therapy)**
- **Educational needs**
- **Speech and language services**
- **OT/PT services**

How do the symptoms of Autism and challenges with emotion regulation fit together?

The domains of autism



Emotional Reactions to Core Impairments

- **Depression and Anxiety**
- **Perception of being Victimized/
Bullied**
- **Negative Behavior during Periods
of Heightened Sensitivity**
- **Overly controlling behavior**

Emotional Reactions to core impairments

- **Cope with sensory over-stimulation**
- **Gain more control over environment, including self and others**
- **Express overwhelm in change in expectations, plan or context**
- **Response to a misinterpreted social cue**
- **Attempt to socially engage (inappropriately)**
- **Attempt to regulate frustration, anxiety or anger**

Common environmental precipitants of Emotional Dsyregulation

- **Group situations**
- **Change in routine**
- **Noisy, chaotic times**
- **Challenging academic tasks**
- **Attempt to socially engage**
- **Others' rigidity**

Reactions of Others

- Irritability, Impatience and Frustration
- Victimization
- Perceived Enslavement to Routine
- Confusion, Sadness
- Interest in Unique Qualities, Strengths
- Mixed peer acceptance

Red Flags

- **Increased withdrawal, social avoidance**
- **Increased mood lability, agitation, irritability**
- **Increase in self-defeating statements, comments on self-harm**
- **Decreased academic motivation**
- **Increased risk taking behavior**

Anxiety and ASD

- Rates of anxiety higher in ASD than in other groups (Bellini, 2004; Gillot & Standen, 2007; Green et al., 2000; Russell & Sofronoff, 2005; White et al, 2009)
- 44-55% of children with PDD meet criteria for an anxiety disorder (White et al, 2009); with rates of symptoms of anxiety varying from 11-84%
- Children with ASD often do not display age-typical symptoms of anxiety (White et al., 2009)
 - Changes in schedule, specific phobias, reactivity to sensory input, externalizing behaviors

Risk Factors for Anxiety in ASD

- **Risks specific to ASD**
 - **Social ability** (Bellini, 2004; Russell & Sofronoff, 2005)
 - **Empathy**
 - **Motivation/rejection**
 - **Awareness**
 - **Access to peers**
 - **Resilience and poor peer groups**
 - **Cognitive ability** (Gadow et al., 2005; Sukhodolsky et al., 2007)
 - **Higher rates with Asperger's/ higher IQ**
- **The prevalence of anxiety disorders is seen most in AS, followed by PDD-NOS and Autism (White et al, 2009)**

Anxiety Treatment and ASD

- **Positive results in randomized controlled trials using CBT treating anxiety in individuals diagnosed with Asperger Disorder** (Chalfant, Rapee, & Carroll, 2007 Sofronoff, Attwood, & Hinton, 2005; White et al, 2009)
- **Several case reports** (Cardaciotto & Herbert, 2004; Hare, 1997; Reaven & Hepburn, 2003)
- **Promising directions are suggested for use of CBT in children and teens with HFA/AS. Results are equivocal for individuals with intellectual disability.**
- **Modifications, and increased “dose” are necessary.**

Your toolbox

- **The relationship**
 - Safe, supportive, structured, non-judgmental
- **Other tools**
 - Prompting
 - Reinforcement
 - Modeling
 - Scripting
 - Role-playing
 - Visual supports
 - Social stories
 - Self-monitoring
 - Mentorship

Basic Rules of Thumb

- Negative contingencies do not work
- Incentives + explicit instruction are more successful—take advantage of preference for rules, use visuals
- Try less typical incentives—within the student's preoccupations/interests
- Use humor with care

Basic Rules of Thumb

Behavior often is serving a communicative function for the child.

“This is too hard.”

“This is confusing.”

“This is too overstimulating.”

“I don’t like this.”

Basic Rules of Thumb

Teach child to communicate the same message with an appropriate behavior. Teach self regulation.

Rather than hit, say “I need space”

Rather than shout, show me a picture of the area where you can take a break.

Basic Rules of Thumb

How can the environment be changed to reduce the need to communicate this message?

- **Eliminate/reduce activities that child dislikes, if possible, or follow with highly preferred activities.**
- **Provide visual supports to reduce confusion and stress.**

Other potential environmental changes

- Offer a calming space and/or stress plan
- Increase predictability and routine
- Provide concrete information about expectations
- Provide visual and organizational supports
- Increase structured interaction time
- Decrease sensory overload

What is Emotion Regulation?

- Emotion regulation refers to the strategies that an individual uses in an effort to achieve a balanced emotional state
 - Emotion regulation is a process.
 - Thus, the emotion regulation system is not turned on/off, like a light switch, but is always adjusting, like a thermostat.
 - Different contexts require different strategies and emotional goals.

What is Emotion Regulation

- Emotion regulation involves the ability to recognize and cope with ones emotions and reactions through:
 - Emotion Identification
 - Emotional Understanding
 - Emotion Regulation
 - Situational identification

Why Emotion Regulation is Important

- Emotion regulation involves strategies to reduce negative emotional states and prolong positive and/or neutral emotional states
- Allows individual to gain more control of themselves and their environment
- Allows individual to have their needs met in a more positive way
- Increases social acceptance and understanding

Why Difficult for Those with ASD?

- Feelings are not logical or concrete, and are unpredictable
- Emotional responses of others are unpredictable
- Emotion regulation relies on the ability to self monitor, a core deficit in individuals with Autism
- Core impairments in social interaction and communication

Why Difficult for Those with ASD?

- **Emotions +/- can be overstimulating**
 - Ex: child is at first overjoyed by a gift, but then dissolves into tears because feelings of happiness are overwhelming and frightening
- **Concrete thinking lead to misunderstanding emotion subtlety**
- **May express emotions in an 'all-or-nothing' fashion or over/under reacting; the slightest annoyance comes out as rage and mildest pleasure as elation**
- **Poor perspective taking/theory of mind leads to the appearance of being "uncaring or lacking emotion"**



Targets for intervention

1) Emotion recognition/behavior regulation

- Identify activating situations
- Identify own and others' emotional states
- Regulate own emotions during stressful situations

2) Communication skills

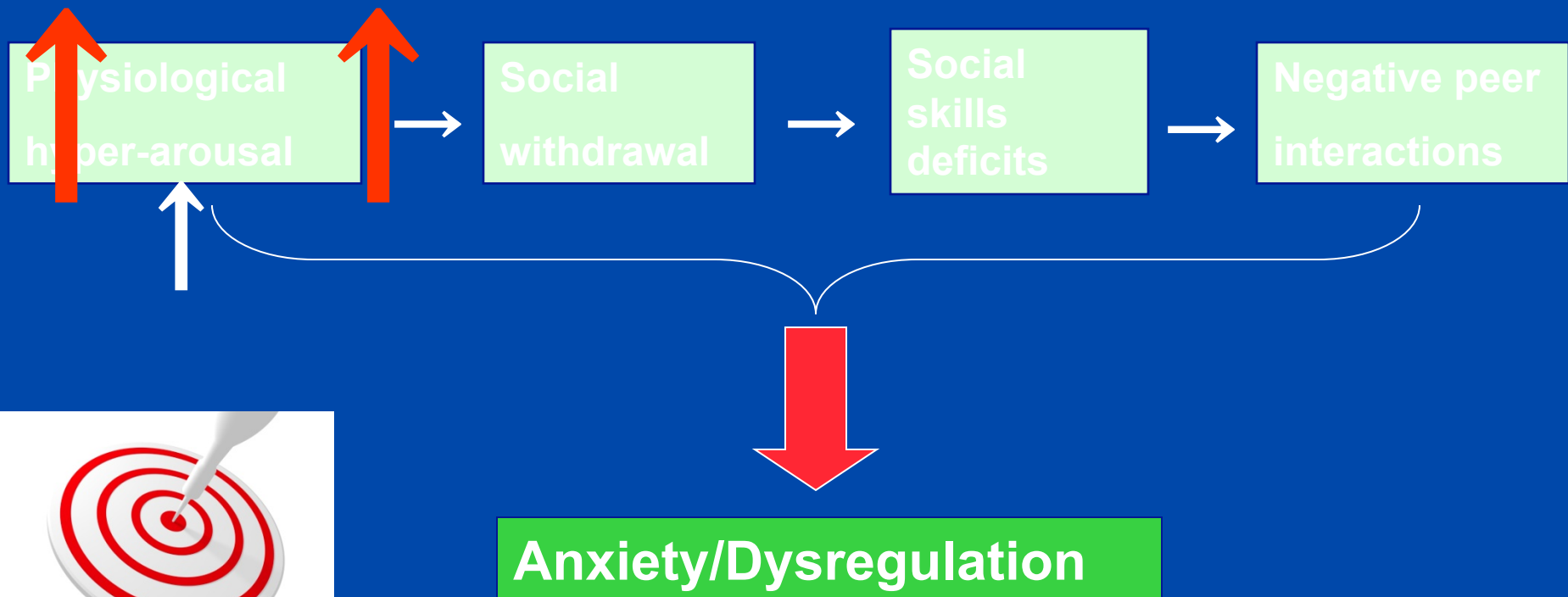
- Build skills related to appropriate initiation and conversation
- Provide alternative communicative strategies

3) Social interaction/peer relations

- Increase social initiation and positive interaction with peers

Rationale for selection of treatment

- Lack of emotion regulation leads to increased social anxiety; therapy for children on autism spectrum should include teaching the child how to regulate their physiological responses to stressful situations. (Bellini, 2006)



How Stress Plays a Role

- **Stress is an all too familiar feeling for those with ASD**
 - They face difficulties on a daily basis trying to communicate effectively, fit in socially, and navigate their own and other's emotions
 - Takes a toll on emotional and physical health
 - Impacts ability to learn, play, and enjoy life
 - Takes secondary toll on those interacting with individual (parents, teachers, other family members, etc.)
- **Bellini (2006): coping strategies reduce stress and arousal that impede the development of social skills and negatively affect social relationships**

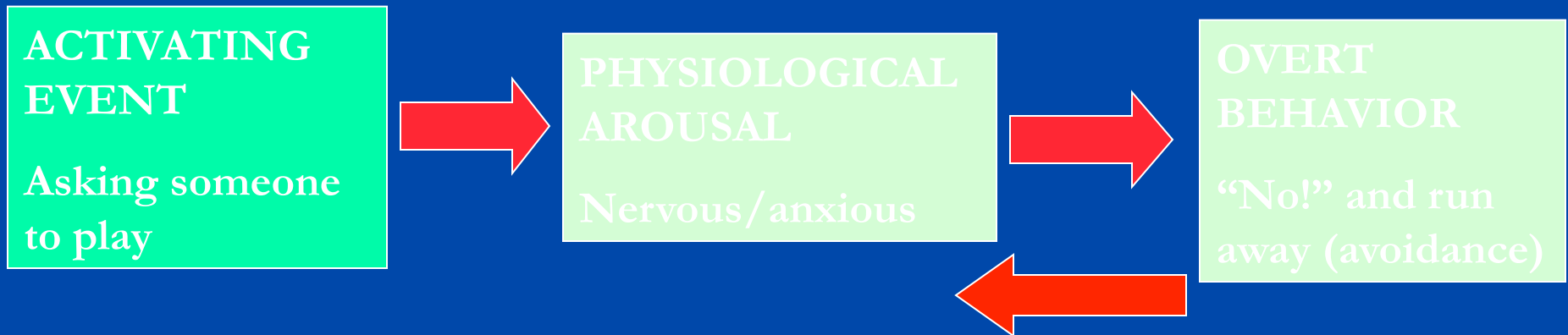
Emotion Regulation: 2 prong approach

- **Stress Management:**
 - Identifying stressors/Activating events
 - Use overt events or behaviors
 - Reducing stress:
 - Prior to any specific event/stressor; overall reduction of stress in life
 - After specific event/stressor; once aroused the use of calming strategies that are effective for individual

Emotion Regulation: 2 prong approach

- **Emotions:**
 - **Emotion Identification**
 - Correct labeling of the emotion
 - **Emotional Understanding**
 - Body awareness
 - Varying degrees of emotions
 - Emotion sequences
 - **Emotion Regulation**
 - Expressing feelings in appropriate ways
 - Strategies for dealing with emotions
 - Practicing self-control

Method of treatment = altering arousal through behavioral strategies



Teaching: When you say "no" (overt behavior), that means you are worried and you don't want to ask someone to play (internal state)

Alter the arousal level through relaxation strategies ("You feel nervous when you're asking someone to play. What can you do to get your body more 'ready' to ask someone to play?")



Stress Management

- **Identify Stressors**
 - Provides information to parents and to the child
 - Assists in identifying those situations where environmental changes may be addressed to aide with stress prevention
- **Stress Hierarchy**
 - Categorizes the stressors for the child
 - Use of visual aids

Example of Visual Aid for Identifying Stressors

STRESS HIERARCHY

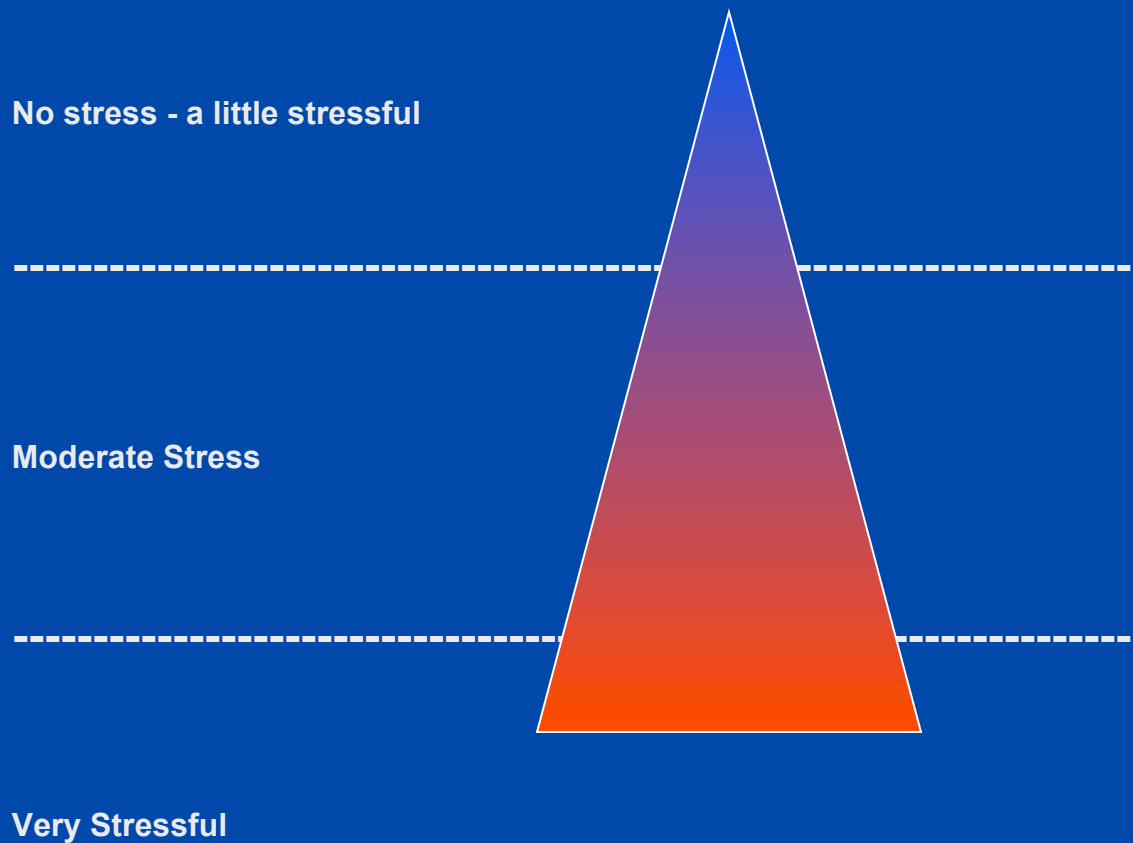
Number each item in order of stressfulness (#1 is least stressful, #12 is most stressful).

- ___ Cleaning bedroom
- ___ Playing with puppy
- ___ Having to get off the computer when told
- ___ Playing with sister
- ___ Having to stop watching TV when told
- ___ Taking a shower
- ___ Exercising/physical activity
- ___ Being told to go to bed
- ___ Being told to do something
- ___ Being laughed at by peers
- ___ Being patient/waiting
- ___ Doing homework

Example of Visual Aid for Identifying Stressors (cont.)

Stress Hierarchy

Place identified stressors on diagram to depict how stressful or 'hot' the specific stressor is to the individual



Reducing Stress (prior to a specific event)

- Allow choice making: provides opportunities to exert control over environment (ex. do you want to wear the red coat or the blue coat)
- Provide predictability through consistency (with rules, overall routine, etc.) and visual supports
- Provide enjoyable, self-esteem building activities daily
- Reduce known stressors (*see stress hierarchy*) when feasible
- Incorporate daily physical exercise
- Incorporate calming strategies and relaxation exercises into the day

Reducing Stress (after a specific event)

- Having a plan in advance for the individual is very helpful
 - Provide quiet space with adult assistance
 - Be sensitive to sensory environment for the child (dark space or fan may be helpful)
 - Provide calming activities (sensory toys, books, repetitive activities, a weighted vest)
 - Use specific calming and relaxation strategies that the child knows

How to Teach Relaxation or Coping Strategies

- **Define what it means to 'calm down'**
 - **A way to be less upset**
- **Provide a rationale for the importance of calming down**
 - **How calming down can have a positive impact on their life**
 - **Important for people to have their feelings under control before they deal with any problem for the best possible result**

How to Teach Relaxation or Coping Strategies

- **Teach specific strategies to calm themselves:**
 - **Breath control (deep breathing, belly breathing)**
 - **Create and review ‘Chill Out’ book or fun book**
 - **Physical relaxation (yoga, meditation, progressive muscle relaxation, tin man vs. snowman)**
 - **Cognitive relaxation (thinking of happy thoughts, dream of flying)**
 - **Active strategies for relief (spaghetti balls, draw/tear up picture, squeeze balls, koosh balls, pulling weeds)**
 - **Unobtrusive calming strategies (bracelet that can be plucked or snapped, rings with dangly charms or that can be easily spun, ear plugs)**
- **Teach active coping strategies:**
 - **Teach pro-social means of gaining control**
 - **“No”, “I want”, “It’s too loud”, “I want a break”**

Incorporate Calming Strategies into the Day

- **Allow child to control relaxation time**
 - **Never use as a punishment**
 - **Encourage, but do not demand**
- **Provide a lot of encouragement and praise for using relaxation or coping strategies**
 - **Remember that a behavior does not have to be perfect to warrant praise or reinforcement**
 - **If expectations are too high and are more than they are able to achieve, they are more likely to stop trying**
 - **Stress causes children to tire and decreases their self-control**
 - **Concentrate on effort and improvement**

Additional methods of treatment for emotion regulation

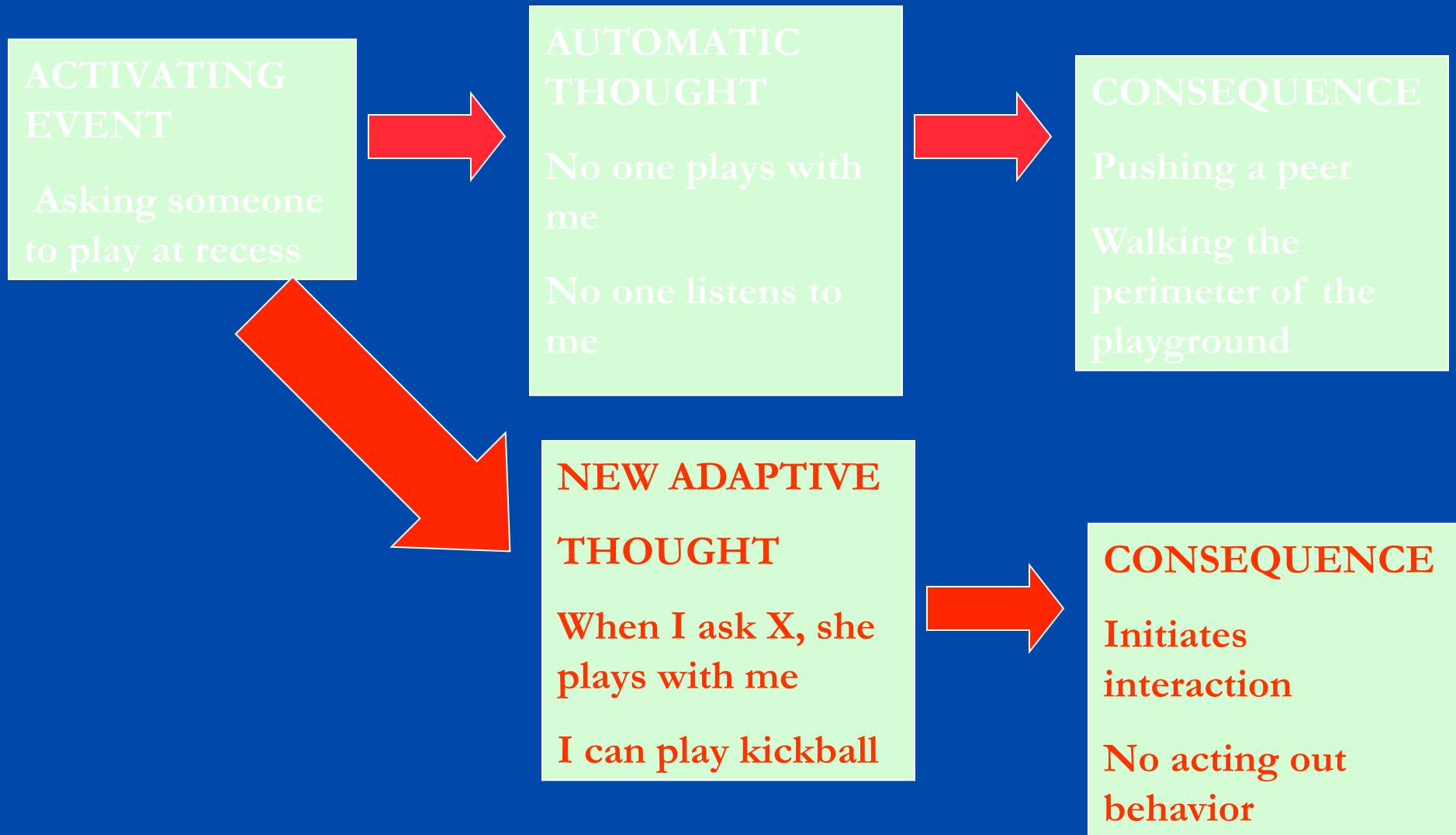
- **Recent studies have shown that CBT is effective in reducing anxiety and increasing emotional awareness in autism spectrum disorders (especially with high-functioning autism and Asperger's)**
(Bauminger, 2002; Chalfant, Rapee, & Carroll, 2006; Sofronoff, Attwood, & Hinton, 2005)

Theoretical and conceptual issues

GAP IN THE RESEARCH...

- Few (if any) empirically supported, validated treatments for low-functioning children with autism and related difficulties; controlled studies are currently underway
- Therapists rely on manuals designed for social skills group training as well as adaptations from techniques used with other populations (e.g., modified CBT)

How would we apply a CBT model to kids with Autism?



Emotional Understanding (cont.)

- **Emotion Sequences**
 - **When you do x, you make people feel y; When people feel y, they often do z**
 - **When you share, kids feel happy. When kids are happy, they say 'yes' more**
 - **When you are flexible with me, it makes me feel calm. When I feel calm, I feel more flexible with you.**

Emotion Regulation

- **Dealing with emotions**
 - **Teach specific self-control strategies**
 - **Strategies previously discussed in stress management section (deep breathing, physical relaxation, etc)**
 - **Red, yellow, green cards**
 - **Stoplight: Calming down steps:**
 - **Stop**
 - **Keep hands to self**
 - **Take a deep breath**

- **Begin to link the concepts together**

Parting Words

- **Be alert for ‘teachable moments’ when you can encourage the child to use the specific strategies**
 - **Use proactively and regularly throughout day**
- **Provide encouragement and a lot of praise**

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