## Disclosures

### Book Royalties


### Research Funding

- National Institute of Mental Health. White (PI). *STEPS: Stepped Transition in Education Program for Students with ASD*

- National Institute of Mental Health. White (PI). *Development of a Novel Neurotechnology to Promote Emotion Recognition in Autism*

- National Institute of Mental Health. Ollendick (PI). *Attention Training for Adolescents with Social Anxiety Disorder*

- Eunice Kennedy Shriver National Institute of Child Health & Human Development. White (co-PI). *Developing an Automated Emotion Training System.*
Overview

- Autism spectrum disorder
- Comorbidity in ASD
- A focus on anxiety and depression
- Identification, dual diagnosis
- Evidence-based assessment
- Empirically based treatment approaches
But first .... A few questions

- What is anxiety?
- What are the hallmarks of ASD?
- Can they co-exist?
- Can anxiety and ASD ever not co-exist?
Jared

- 15 year old
- ASD (uncomplicated)
- Referral
  - Parents: social challenges, excessive worry once triggered, academic problems
  - Jonah: making friends
- Cognitive abilities in ID range, but academically functioning in Low Average range
  - Much better verbal than visual-spatial or working memory
Questions

- How do you conceptualize the anxiety and worry?
- How does the cognitive profile affect treatment?
Jared’s Case Conceptualization

- **Target behaviors:** improved emotion regulation (less worry), social skills
- **Predisposing factors**
  - Impaired social information processing, chronic arousal and edginess, social awkwardness, stability in the milieu
- **Precipitating factors**
  - Turning 16, in high school
- **Protective factors**
  - Sense of humor and kindness toward others, social motivation, engaged and helpful parents with realistic expectations
- **Perpetuating factors**
  - Rumination, behavioral avoidance, parental accommodation

*cf, Heyne, Sauter, Ollendick, Van Widenfelt, & Westernberg, 2014*
Jared’s TFA Cycle

They won’t like me

scared
Intervention

- Train emotional awareness and vocabulary
- Skills practice (targeting subtle, fluid skills)
- Self-monitoring (of thought and behavior)
- Increase repertoire of ER strategies
- Assist family in preparing for transition
Autism Spectrum Disorder

PART 1
What is ASD?

- Neurodevelopmental disorder: lifelong, pervasive, and heterogeneous
- 1 in 88
- 4-9: 1 ratio (male: female)
- Usually diagnosed by age 5*
- Recently, more recognition and diagnosis of ASD in adults
- Comorbidity common, but not understood

Dawson, 2008; Mazefsky et al., 2012; Witwer & Lecavalier, 2010; U.S. CDC, 2012; White et al., 2009
Etiology

- Diverse etiology – common path
  - Equifinality
  - Atypical social interaction = a shared proximal risk factor?

(Dawson, 2008; Klin & Jones, 2013; Stoner et al., 2014)
Cascading Effects

- Impaired social motivation (biologically based decreased intrinsic reward with social stimuli (valuation))
- Decreased salience of social information
- Less processing of social information (e.g., atypical processing, surface-level)
- Atypical social interaction affects developing neural circuitry, further canalizing neural circuitry involved in social perception
- Manifest social atypicalities and difficulties
Developmental course of ASD

- Often identified around age 2, with most kids identified by age 5**
- Often gradual improvements with age, but likely to continue to experience many problems
  - Less obvious, but still socially impairing
- Usually a chronic and lifelong condition
- IQ and language development are the strongest predictors of adult outcomes

Billstedt et al., 2005; Mazefksy & White, 2013; Howlin, Mawhood, & Rutter, 2000
Smith, Maenner, & Seltzer (2012)

FIGURE 1 Change in Waisman Activities of Daily Living (W-ADL) scores over time for autism spectrum disorder sample, individual and group trajectories. Note: Quadratic (age²) mixed-model paramaterizations displayed.
Comorbidity
What is Comorbidity?

- Either the presence of one or more disorders (or diseases) in addition to a primary disease or disorder, or the effect of such additional disorders or diseases [Wikipedia]
- Manifestation of two or more disorders that co-occur more often than would be expected by chance alone [Mash & Dozois, 2003]
- “Ridiculously high” [Rutter, 2011]
Psychiatric Comorbidity in ASD

- 70% of children with ASD have at least one comorbid disorder; more than half have ≥ 2
- Though estimates vary greatly, the most common comorbid disorders are social anxiety disorder, specific phobia, ADHD, depression, and ODD

Leyfer et al., 2006; Simonoff et al., 2008
Estimates of Comorbidity

- Anxiety: 40% or more
- Depression: 10% – 50%
- ADHD: 25% - 50%
- ODD, Schizophrenia, Bipolar: may be no different than outpatient samples

Gadow, DeVincet, Pomeroy, & Azizian, 2004; Leyfer et al., 2006; Magnuson & Constantino, 2012; Simonoff et al., 2008; Strang et al., 2012; van Steensel, Bogels, & Perrin, 2011; White, Oswald, Ollendick, & Scahill, 2009
Severity and Treatment

- Children and adolescents who present to generalist clinics have more comorbid diagnoses, and more functionally impaired, than those who are seen in ASD specialty clinics
  - Depression: 56% (general), 37% (specialty)
  - Anxiety: 61% (general), 54% (specialty)

- Hospitalizations
  - About 1 in 10 youth with ASD are hospitalized prior to age 21
  - 1 in 5 youth with ASD seen in generalist clinics have been hospitalized at least once

Joshi et al., 2014; Siegel et al., 2014
Daniel: A New Referral

- 16 years old, past dg of ASD
- Current concerns (of parents): worry, social avoidance/disinterest, isolated, checking behaviors, compulsive cleaning, intense need for order
- Very intelligent, and very unmotivated for therapy

- What information would you want at intake?
- Diagnostic impressions? What would you want to further consider?
Too common to be coincidence

- **Anxiety**
  - ~40-50% of those with ASD
  - More common in higher functioning individuals
  - Social anxiety may be most common

- **Depression**
  - No meta-analysis to date; estimates between 1.4% and 70%
  - Evidence for genetic linkage

Lugnegard et al., 2011; Simonoff et al., 2008; Van Steensel et al., 2011; White et al., 2009
Exacerbation of repetitive behavior/rituals
Substance use/abuse
Family/parent conflict

Social Problems

Anxiety/Depression

Growing Awareness

Negative expectations – further avoidance
Exacerbation of repetitive behavior/rituals
Academic problems
Substance use/abuse

Withdrawal, isolation, psychopathology

Loneliness
Agitation/anger
Family/parent conflict
Underachievement
Depression
ASD, social anxiety, and hostility

- Social anxiety predicts aggression in children with ASD
  - HF children with ASD report more humiliation/rejection fears than children with ODD, at levels commensurate with those diagnosed with SoP
  - Curvilinear relationship found between social-evaluative fears and aggression in HFASD group only

Pugliese, White, White, & Ollendick, 2013
Fear of Negative Evaluation in ASD

- Fear of negative evaluation ➔ greater fixation duration to social threat (anger, disgust)

White, Maddox, & Panneton, in press
Fear of Negative Evaluation in ASD

- Fear of negative evaluation ➔ greater fixation duration to social threat (anger, disgust)

<table>
<thead>
<tr>
<th></th>
<th>Disgust Eye</th>
<th>Disgust Face</th>
<th>Happy Eye</th>
<th>Happy Face</th>
<th>Angry Eye</th>
<th>Angry Face</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASD</td>
<td>BFNE</td>
<td>.459^</td>
<td>.680**</td>
<td>.434</td>
<td>.398</td>
<td>.471^</td>
</tr>
<tr>
<td>TD</td>
<td>BFNE</td>
<td>.133</td>
<td>.252</td>
<td>.162</td>
<td>-.085</td>
<td>.157</td>
</tr>
</tbody>
</table>

Controlling for SRS

**p < .01, ^ p < .10
A Transdiagnostic Model of Anxiety and Depression in ASD

PART 4
Imagine …..

You have just had a heated argument with your partner/spouse, over the telephone, about an issue you care deeply about and on which the two of you seem to disagree. You are angry, you feel tense, and you feel hopeless that a resolution is possible. As you hang up the phone, one of your students knocks on your door to remind you that you are scheduled to give a guest lecture in class right now down the hall. You gather your notes and walk with him to the classroom to speak.
Emotion Regulation

- The ability to intentionally modulate one’s emotional state to promote goal-directed and adaptive behavior

Emotion (experience): high negativity/ low positivity, poorly differentiated emotions, poor insight

Eisenberg & Spinrad, 2004; Gross, 1998; Losh & Capps, 2006; Samson, Huber, & Gross, 2012
Disruptive Mood Dysregulation Disorder (DMDD)

- Persistent irritability
- Severe recurrent outbursts (temper, rages), inconsistent with developmental level
- Persistent (>12 mos), cross-situational (>2), and severe
- Diagnosis applied between age 6 and 18; with onset prior to age 10
- No mania or hypomania
- R/O ODD, IED, BPD
  - Less episodic than classic BPD
* To diagnose DMDD in child with ASD, the outbursts cannot occur only in context of the ASD (e.g., rage in response to change in schedule)
Intermittent Explosive Disorder (IED)

- Behavioral outbursts, failure to control aggressive impulses
- Aggression not premeditated (reactive)
- > 6 years old

* To diagnose IED in ASD, the aggressive outbursts must be in excess of what is typical (in ASD) and warrant independent clinical attention
Disturbed self-regulation is apparent early in course of ASD
- less positive affect in infancy
- heightened distress response @ 12 mos
- greater irritability @ 36 mos
- more anxiety in childhood and adolescence

Garon et al., 2009; Zwaigenbaum et al., 2005
Emotion Regulation (Tenets)

- People differ on use of ER strategies.
- Individual differences in ER tend to be fairly stable.
- These differences across people are related to mental health and well-being, as well as pathology.

ER Manifest: NSSI (non-suicidal self-injury)

- NSSI: direct and deliberate physical self-destruction, absent of intention to die
  - Teen community samples: 4-6%
- NSSI in ASD
  - ~1 in 10 children with ASD self-harms
  - RCT (n=30; teens with ASD) targeting anxiety and social deficits:
    - 6 had engaged previously in NSSI
    - During 14-wk program: 2 cut, 1 overdosed
    - Examples of SI/NSSI: trying to freeze self, jumping off roof of house, jumping out of moving car
    - Those who engaged in NSSI reported more depression (t = 2.59, p < .05). They did not exhibit more severe SRB.

Lecavalier, 2006; Maddox & White, 2012; Plener, Brunner, Resch, Fegert, & Libal, 2010; White et al., 2013
ER Manifest: Irritability

- Irritability and aggression
  - Reactive (vs proactive)
- Common problems
  - Only approved medications in ASD: aripiprazole & risperidone (trials gauged change with ABC Irritability subscale)
- Co-occurring DBD confers unique risk, in addition to ASD

Aman et al., 1985; Mazefsky & White, 2013; McDougle et al., 2005; RUPP, 2002; Storch et al., 2012
**ER Manifest: Anxiety & Depression**

- Internalizing symptoms are predicted by poorer emotion regulation in school-age children
- Social anxiety predicts aggression in children with ASD
- Social anxiety mediates relationship between ASD traits and hostility \[n = 618, \text{college students}\]

Gotham, Brunwsser, & Lord, in press; Pugliese et al., 2013; van Steensel, Bogels, & Perrin, 2011; White, Kreiser, Pugliese, & Scarpa, 2012
Process Model of ER

Situation selection ➔ Change the situation ➔ Attention deployment ➔ Cognitive change ➔ Response modulation

Emotion event

Gross & John, 2003; Gross & Levenson, 1997
## ER Strategies

<table>
<thead>
<tr>
<th>Adaptive</th>
<th>Maladaptive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reappraisal</td>
<td>Suppression of experience</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>Hiding expression</td>
</tr>
<tr>
<td>Acceptance</td>
<td>Resignation</td>
</tr>
<tr>
<td></td>
<td>Avoidance</td>
</tr>
<tr>
<td></td>
<td>Rumination</td>
</tr>
<tr>
<td></td>
<td>Self-criticism</td>
</tr>
</tbody>
</table>

Flexible implementation is critical

Shared Risk Processes

- Hyperarousal
- Atypical amygdala/PFC function
- Poor connectivity
- Emotion dysregulation
- Irritability
- Anxiety
- Depression
- Rage/aggression
- Self-injury

Dichter et al., 2012; Mazefsky et al., 2013; Pitskel et al., 2011; White et al., 2014
Implications

- Parsimony in conceptualization may inform transdiagnostic treatment
  - # of community diagnoses predicts # of medications

- Coherency in explanation may propel clinical and basic research
  - ASD: broad-reaching pathology (neural systems involvement, underconnectivity, diverse bio/cognitive roots)
  - More systemic explanation of diverse secondary problems is reasonable (could such broad biological disruption contribute only to impaired social/communication?)

Mazefsky et al., 2012
Clinical Recommendations

- Develop breadth of strategy repertoire & flexibility in implementation
  - Sometimes suppression is all that’s possible
  - Adaptive strategies are those that are used flexibly
  - Caveat: Sometimes routine & structure trump (plan ahead – the A plan and the B plan)

- Focus on strengthening antecedent-focused (and adaptive) strategies; identify triggers
  - Reappraisal, acceptance, problem-solving
  - Going beyond ABA and environmental modification

- Teach emotional awareness (insight)
  - Might be complicated by medication?
PART 5

Identification, dual diagnosis, and evidence-based assessment
Clinical presentation of anxiety and depression in ASD
Commonly Used Measures of Anxiety and Depression

• Rating scales
  ○ Depression: Reiss Scale, Disability Assessment Schedule, CBCL
  ○ Anxiety: MASC, SCAS, SCARED

• Interviews
  ○ K-SADS, ADIS

• Self-reports
  ○ Children’s Depression Inventory
Behavioral Assessment

- Behavioral avoidance tests
  - Graduate exposure to feared stimulus
  - Observe behavior, can measure physiological response
- Functional assessment
  - Monitor RBs and rituals
- Modified SUDS
  - Can use pictures, or pointing
Think Outside the checkBOXes

- Consider time and symptom progression
- Parent-child agreement tends to be poor
- Depressed mood is most common marker
  - But this is infrequently reported directly by the client
- Assess dimensionality:
  - Physiological (arousal, somatic complaints)
  - Behavioral (avoidance, decreased speech)
  - Cognitive (perception, interpretation, bias)

Kreiser & White, 2014; Renno & Wood, 2013
Considerations

- Reliance on accurate, verbal communication can hamper accuracy
  - Even very capable, verbal individuals can struggle to describe emotional states
- Hone in on changes from baseline
  - Here it is especially useful to talk to partners, family members
Questions to Aid Differential Diagnosis

- Are the symptoms better accounted for within the ASD?
- Do the mood/anxiety symptoms contribute to impairment, above and beyond ASD?
- Is the response excessive or unreasonable?
- Is this a new symptom? Does its onset mark a change from baseline?
- Are the symptoms tethered to a particular stimulus or situation, or a function of unpredictability/ change?
- What drives disengagement or avoidance?
# Distinguishing between SAD and ASD

<table>
<thead>
<tr>
<th>SAD (-ASD)</th>
<th>ASD (+/-SAD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No evidence of early social deficit</td>
<td>• Evidence of early-onset social problems</td>
</tr>
<tr>
<td>• Friendships may be reciprocal, but not intimate (support-directed)</td>
<td>• Few to no same-age friendships. Friendships tend to not be reciprocal, and are often immature</td>
</tr>
<tr>
<td>• Social avoidance stems from anxiety/fear</td>
<td>• May assert/initiate contact, but rendition is awkward</td>
</tr>
<tr>
<td>• Unassertive</td>
<td>• Can be overly assertive in some situations or off-topic, qualitatively unusual if retiscent</td>
</tr>
<tr>
<td>• Youth reports feeling scared</td>
<td>• May not identify feeling scared or anxious (might be diffuse ‘bad’ feelings)</td>
</tr>
</tbody>
</table>

Adapted from White & Schry, 2011
### Distinguishing between OCD and ASD

<table>
<thead>
<tr>
<th>OCD (-ASD)</th>
<th>ASD (+/- OCD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No evidence of early social deficit; social life may be impacted by OCD, not the reverse</td>
<td>• Evidence of early social impairment exists</td>
</tr>
<tr>
<td>• Compulsions serve neutralization function</td>
<td>• No clear link from rituals or compulsions to distress/fear</td>
</tr>
<tr>
<td>• Obsessional content is distressing; affect is negative</td>
<td>• ‘Obsessional’ content is appetitive; affect is positive</td>
</tr>
<tr>
<td>• Compulsions are negatively reinforcing</td>
<td>• Rituals are positively reinforcing- maybe</td>
</tr>
</tbody>
</table>
Distinguishing between DMDD/MDD and ASD

<table>
<thead>
<tr>
<th>DMDD/MDD (-ASD)</th>
<th>ASD (+/- DMDD/ASD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of longstanding adherence to routines or rituals</td>
<td>Persistent irritability is not the hallmark feature, though NA may be high</td>
</tr>
<tr>
<td>Diminished interest, compared to premorbid baseline</td>
<td>Triggers to outbursts (aggressive episodes) are identifiable, and may be related to change in routine</td>
</tr>
<tr>
<td>Socially, may be rejected or controversial (not neglected)</td>
<td>Persistently low social interest/avoidance</td>
</tr>
<tr>
<td>Vegetative symptoms represent a change</td>
<td>Often socially neglected</td>
</tr>
<tr>
<td></td>
<td>Sleep problems and eating atypicalities are chronic</td>
</tr>
</tbody>
</table>
Empirically based treatment approaches
Depression

- Most common treatment: Pharmacotherapy
  - SSRIs, tricyclics, mood stabilizers, antipsychotics,
CBT: A preponderance of evidence

- Primary ingredients in CBT
  - Somatic management
  - Cognitive restructuring
  - Problem solving
  - Graded exposure
  - Relapse prevention

CBT for Children with ASD

- **Case Studies and Small Group Studies**

- **Randomized controlled trials**
  - Reaven et al., 2012 – 7-14 yrs.
  - Sofronoff et al., 2005 – 10-12 yrs.
  - Chalfant et al., 2007 – 8-13 yrs.
  - Storch et al., 2013 – 7-11 yrs.
  - Wood et al., 2009 – 7-11 yrs.
  - White et al., 2013 – 12-17 yrs.
Why might CBT not endure in ASD?

- If anxiety and mood disturbance are the manifest of poor emotion regulation that is enigmatic of ASD
- If ASD itself contributes to the experience of anxiety
  - In addition, features of ASD such as alexithymia, diminished insight, impaired skill transfer, and cue dependency may lessen CBT effects

Kleinhans et al., 2010; Mazefsky et al., 2013; Mazefsky & White, 2013; White et al., 2010
MASSI: Multimodal Anxiety and Social Skills Intervention

- Anxiety may become especially acute during adolescence
- CBT has been shown to be effective treatment for anxiety (and strong support for ASD)
- MASSI: individual CBT (12 modular sessions), parent coaching, and group practice with peers. Treatment includes psychoeducation, didactic training (skills), practice with corrective feedback, thought restructuring, and exposure.
  - Moderate to large effects on social impairment and anxiety (White et al., 2013)

Dalton et al., 2007; Joseph et al., 2008; Kyllianinen & Hietanen, 2006; Scarpa, White, & Attwood, 2013; White et al., 2010

White: K01 MH079945
MASSI Conceptual Framework

- Anxiety
  - Learning history & lack of practice opportunities
  - Developmental changes
  - Poor recognition of internal/physiological anxiety cues
  - Changing social demands

- Social Problems
  - Biological / genetic risk factors
  - Growing awareness of social difficulties
  - Lack of interest or inability to achieve age-typical developmental milestones
Does ASD severity predict anxiety reduction with CBT?
Effect of SRS Social Communication Score

**CASI-20 Score**

- **Mean**
- **1 SD below Mean**
- **1 SD above Mean**

**Timepoint**
- Baseline
- Midpoint
- Endpoint

**Effect of SRS Social Communication Score**

- **Mean**
- **1 SD below Mean**
- **1 SD above Mean**

\[ t(22) = -2.983, p = .007 \]

**MASC-P Score**

**Timepoint**
- Baseline
- Midpoint
- Endpoint

\[ t(22) = -2.313, p = .030 \]
Does verbal ability predict anxiety reduction with CBT?
Effect of VIQ

**CASI-20 Score**

- Mean
- 1 SD below Mean
- 1 SD above Mean

**Timepoint**

- Baseline
- Midpoint
- Endpoint

**Effect of VIQ

- **CASI-20 Score**
  - $t(22) = -2.627, p = .016$

- **MASC-P Score**
  - $t(22) = -2.590, p = .017$
Does anxiety reduction persist after treatment ends?

“Every day for me is an uphill struggle. On the positive side, it's great for my glutes!”
CASI-20 - Effect of STAI

$\text{CASI-20 Score}$

$\text{Time (in days)}$

$\text{STAI-T}$
- Mean
- 1 SD below Mean
- 1 SD above Mean

$t (23) = -3.160, p = .005$ (follow-up)
Conclusions

- ASD severity and VIQ predict treatment response. ASD severity also predicts anxiety symptoms.
  - Might consider VIQ as moderator of CBT treatment response and explore how ASD deficits can contribute to anxiety.
- Heightened parental anxiety is associated with maintenance of treatment effect.
  - We need to explore this further (a curvilinear effect?)
- There is preliminary evidence of sustained improvement with treatment.
  - How can we augment treatment to increase sustainability?
Adaptations to CBT for Clients with ASD

- Integration of acceptance within change
- Emphasize development of unique strengths
Here are some commonly seen attributes of people who have autism spectrum disorders. Circle any that you think apply to you.

Loyal  Honest
Hard time with change Unique
Friendly Rigid
Helpful Rule-bound
Gullible Isolated
Emotional Alone
Lonely Smart
Lonely Expert
Nervous Attentive to details
Odd Dedicated friend
Adaptations to CBT for Clients with ASD

- Integration of acceptance within change
- Emphasize development of unique strengths
- High structure within session
- Provide the logic/rationale and, when possible, use examples that engage

Attwood & Scarpa, 2013; Hagopian & Jennett, 2014
How we think affects how we feel and what we do. When we recognize our thoughts, we can work on changing them to make ourselves feel better – calmer and more in control. That also makes us better able to do the things we want to do. Think of the brain like a computer that takes in information (or data) and interprets it to make sense of it. No two brains interpret the same information in exactly the same way. Everyone basically runs on a different program, or operating system. If there is a ‘bug’ in my operating system that makes me ignore certain pieces of information, then that will affect how I make sense of something, right? What we need to do is figure out how our thinking (our operating system) affects how we interpret what happens to us and around us. By identifying the ‘bugs’ in the system, which we call ‘errors in thinking,’ we can improve how our system runs. Can you think of some thoughts you have that might get in the way of the things you want to do?

{Encourage the individual to think of examples.}

People who experience excessive anxiety or worry tend to engage in certain cognitive distortions or errors in thinking, specifically, overestimating the probability of the feared outcome (e.g., rejection by peers), overestimating consequences, and black or white thinking. Let’s take a look at some of the ‘errors in thinking’ that a lot of people have, especially people with ASD and those who experience a lot of anxiety.
Adaptations to CBT for Clients with ASD

- Integration of acceptance within change
- Emphasize development of unique strengths
- High structure within session
- Provide the logic/rationale and, when possible, use examples that engage
- Build emotional awareness

Attwood & Scarpa, 2013; Hagopian & Jennett, 2014
Where is my Anxiety?

Try to write in something for each line below. If you have more than one thing to write, that’s even better.

When I feel anxious, I.....

Think (What kinds of things go through your mind?): ______________________

___________________________

Feel (What kinds of feelings/emotions do you have?): ______________________

___________________________

Do (What are likely to do/say?): ______________________

___________________________

Experience (What things do you notice going on in your body?): ____________

___________________________
Adaptations to CBT for Clients with ASD

- Integration of acceptance within change
- Emphasize development of unique strengths
- High structure within session
- Provide the logic/rationale and, when possible, use examples that engage
- Build emotional awareness
- Extensive behavioral practice, repetition
- Immediate, specific feedback
- Involving supports into intervention
- Teach new scripts
- Make the abstract more concrete (e.g., cartoons, social stories)

Attwood & Scarpa, 2013; Hagopian & Jennett, 2014
Below is a picture of Tobias and Sandra when they get their grades back. Fill in their faces to reflect their feelings, the thought bubbles to reflect their thoughts or 'self-talk', and the spaces on the sides to reflect what they might do - or their actions.
Adaptations to CBT for Clients with ASD

- Integration of acceptance within change
- Emphasize development of unique strengths
- High structure within session
- Provide the logic/rationale and, when possible, use examples that engage
- Build emotional awareness
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- Involving supports into intervention
- Teach new scripts
- Make the abstract more concrete (e.g., cartoons, social stories)
- Video modeling

Attwood & Scarpa, 2013; Hagopian & Jennett, 2014
Adaptations to CBT for Clients with ASD

- Integration of acceptance within change
- Emphasize development of unique strengths
- High structure within session
- Provide the logic/rationale and, when possible, use examples that engage
- Build emotional awareness
- Extensive behavioral practice, repetition
- Immediate, specific feedback
- Involving supports into intervention
- Teach new scripts
- Make the abstract more concrete (e.g., cartoons, social stories)
- Video modeling
- Altered pacing
- Supplementing exposures

Attwood & Scarpa, 2013; Hagopian & Jennett, 2014
Core Beliefs in Anxiety

• Stem from anxious apprehension:

• That terrible thing can happen (again) to me but I can’t predict when or where so I must be prepared at all times and yet I don’t have the skill, knowledge, ability to deal with it!

Adapted from D.H. Barlow, 2004
Inflexibility serves an adaptive role: limits unexpected, overloading events

- Overload is dangerous: It leads to anxiety, impulsivity, inappropriate behavior
- Overload creates profound risk in context of: Social isolation, teasing and bullying
- In a mine field it is wise to use caution ~Ari Ne’eman
  - Respect routines that don’t interfere
Case examples and discussion

PART 7
Maureen

- 13 year old
- ASD, Social Anxiety Disorder (sub-clinical specific phobia of dark, separation anxiety, and GAD)
- Referral
  - Mother: nervous around peers, risk of succumbing to peer pressure, impulsive
  - Maureen: go to the 8th grade dance
- Cognitive profile unremarkable (Average range)
Questions

- How do you conceptualize the anxiety Maureen is experiencing?
- How might you disentangle what is age-typical from that which may be non-normative?
- Where would you start in treatment?
Maureen’s Case Conceptualization

- **Target behaviors**: decrease social anxiety and increase attempts to interact with peers
- **Predisposing factors**
  - Social awkwardness, stability and complexity in the milieu (shared memory of Maureen), single parent and limited resources
- **Precipitating factors**
  - Internal motivations, puberty, mother’s fears
- **Protective factors**
  - Very motivated for therapy, bright, motivated parent
- **Perpetuating factors**
  - Retreats when failure is perceived as a possibility, ASD-blaming, ‘freezing’ when socio-evaluative fears are triggered

*cf, Heyne, Sauter, Ollendick, Van Widenfelt, & Westernberg, 2014*
Intervention

- MASSI
- Targeted modules included coping with worry, handling rejection, and problem-solving
- In-session foci: behavioral rehearsal (talking to boys), identifying unhelpful thoughts (this is awful, everyone will notice), exposure (reading aloud, changing audience)
  - Augmented by the group sessions for skills practice and further exposure
Summary

- The nature of social disability in ASD
- Evidence-based interventions (EBI)
- Mechanisms of action
- Evidence-based assessment (EBA)
- Components of effective treatment
Thank You!

QUESTIONS?
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