Autism Spectrum Disorder:
Managing Emotion Regulation and Social Difficulties

Kylee Miller, PhD, NCSP
Assistant Professor of Pediatrics
Licensed Pediatric Psychologist &
Nationally Certified School Psychologist
Child Development and Rehabilitation Center
Institute on Development and Disability
Oregon Health and Science University
December 11, 2020
Objectives

Participants will be able to:

- Explain the emotion regulation and social challenges faced by individuals with ASD and related disorders.
- Describe the nature of social cognitive challenges in individuals with ASD and how these can affect social, academic, and behavioral functioning.
- Discuss selected emotional regulation and social cognitive intervention strategies that can be taught to individuals with ASD and related disorders.
Emotion Regulation Challenges in Neurodevelopmental Disabilities

- Cognitive/behavioral rigidity
- Anxiety; irritability
- Behavior self-monitoring and regulation
- Impulsivity
- Low frustration tolerance
- Emotion understanding/expression
- Challenging behaviors and self-injury

Sources: Lecavalier et al. (2006); Capps et al. (1993); Jahromi et al. (2012); Mazefsky et al. (2014)
Social Challenges in ASD

Specific social challenges among individuals with ASD:

- Difficulties with social-emotional reciprocity (social approach and response)
- Difficulties with nonverbal communication (using and understanding facial expressions, gestures, cues, eye contact)
- Relationship difficulties, limited social insight, difficulty adjusting behavior to social context, interest in others
- Repetitive/restricted interests and behaviors that are interfering

Source: DSM-5 (APA, 2013)
What factors contribute to social and emotional difficulties in ASD?

- Neurodevelopmental differences (social information processing, emotion regulation, cognitive appraisal skills)
- Social cognition (“Theory of Mind”) difficulties
- Weak central coherence (bigger picture thinking)
- Executive functioning deficits
- Joint attention difficulties
- Communication impairment

Source: Insel & Fernald (2004); Adolphs et al. (2001); Schultz et al. (2006); Campbell et al. (2006); Rippon et al. (2007); Klin et al. (2002); Mazefsky et al. (2014)  Image: www.autismtopics.org
Intervention is warranted when behaviors are

- harmful to the self or others
- unsafe or destructive
- distressing to the individual/family
- disruptive of learning
- disruptive of social functioning
- limiting participation in daily living or occupational activities
Need for Interventions

- Social impairments often become increasingly apparent into adolescence
- For high-functioning adolescents, social skills are typically the primary area of deficit
- High functioning individuals typically have increased awareness of social differences and increased desire for social relationships
- Social difficulties interfere with peer relationships, school performance, occupational success, and adaptive functioning
- Adolescents with ASD are at an increased risk for loneliness, depression, and anxiety
- Evidence-based interventions are important for improving social functioning, broad mental health, and overall wellbeing

Sources: Paul (2003); Esbensen et al. (2009); Picci & Scherf (2014); Lasgaard et al. (2004)
Evidence Based Treatments

Comprehensive Treatment Models (CTM)
(e.g., LEAP, TEACCH, Denver Model)

A set of practices used together to accomplish broad learning or developmental impact on the core deficits of ASD

- have a theoretical framework
- intense
- occur across years
- target multiple outcomes (social, communication)

Focused Intervention
(e.g., shaping, visual supports)

Individual interventions used to address a skill or behavior present in an individual with IDD or ASD

- operational defined, specific
- shorter time course (weeks–months)
- address specific outcomes
- Effective for broad range of ages, settings, behaviors

- Interventions can be used together with other strategies and interventions to target different behaviors
- specific interventions are often components of CTMs

Wong, Odom, Hume, et. al. (2014) Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder
Evidence-Based Practices Identified by the National Professional Development Center

Prompting

**Reinforcement**
- Task Analysis and Chaining
- Antecedent-based intervention
- Extinction
- Functional Communication Training

**Functional Behavior Analysis**

**Response Interruption/Redirection**

**Differential Reinforcement**

**Visual Supports**
- Structured Work Systems

**Social Narratives**
- Naturalistic Interventions
- Peer Mediated Interventions
- Pivotal Response Training
- Social Skills Training Groups
- Speech Generating Devices
- Computer Aided Instruction
- Picture Exchange Communication
- Video Modeling
- Discrete Trial Training
- Time delay
- Self-Management
- Parent Implemented Intervention

Features Across Interventions

- **Clear**—understood by family/teachers/caregivers
- **Consistent**—family/school/caregivers are on the same page with the interventions, expectations, and rewards
- **Feasible**—strategies need to be practical and available across settings and team(s)
- **Steady**—new strategies/interventions should continue for at least 3-4 weeks
- **Continuity**—keep strategies in place even when the behavior improves
- **Remember Extinction Bursts**
- **Keep data**
Comprehensive Treatment Models

Applied Behavior Analysis

- **Applied**
  - Applied interventions focus on behavior change that is meaningful/socially important to the individual.

- **Effective**
  - Interventions are monitored to ensure strategy effectiveness (positive behavior change correlated to intervention).

- **Behavioral**
  - ABA focuses on measurable behavior change (behavior that can be clearly defined and observed).

- **Generality**
  - Learned skills can be demonstrated in different settings and under a variety of contexts, and maintained over time.

- **Analytic**
  - Data is required to demonstrate that applied interventions correlate with functional behavior change.

- **Conceptually Systematic**
  - Strategies and interventions are research-based and emphasize the principles of behavior.

- **Technological**
  - Targeted behaviors are described specifically and procedures are outlined in detail so that they can be implemented in the same way by different people.
Prioritize

- Set realistic goals
- Start with small steps that can build on each other
- Target behaviors that are dangerous
- Target skills that would help to improve situations across several settings
Sampling of emerging, promising, and established social cognitive and emotion regulation interventions
Social Skills Interventions: “Active Ingredients”

- Effective and engaging teaching practices for targeted population
- Directly addresses underlying and overt difficulty areas
- Teaches skills that are developmentally appropriate
- Opportunities for direct feedback and coaching
- Group formats
- Promotes generalization of skills
- Focuses on bigger picture goals
Common Limitations of Social Skills Interventions

- Failure to assess treatment outcomes
- Failure to teach ecologically valid social skills
- Failure to include socialization assignments/additional practice
- Failure to generalize skills to other settings
- Failure to include caregivers in treatment

- In research, failure to use:
  - Randomized controlled trials
  - Independent raters
  - Measures of sustained treatment outcomes

Source: (Gresham, Sugai, & Horner, 2001; White, Keonig, & Scahill, 2007; DiSalvo & Oswald, 2002; Rogers, 2000; Rao, Beidel, Murray, 2008)
Peer Mediated Intervention and Instruction (PMII)

- Includes Peer Modeling, Peer Initiation Training, Direct Training for Target Student and Peer, Peer Networks, Peer Supports
- Implemented in natural setting (e.g., at school lunch, recess, transitions between classes) – helps with generalization
- Increases positive interactions with peers
Social Narratives: Social Stories™

- Developed by Carol Grey to teach children with ASD about social situations and how to act within these situations
- Written from the perspective of individual with ASD
- Uses minimum of 2-3 descriptive sentences for every 1 directive sentence
  - Descriptive: who, what, where, when, how, and perspective of others
  - Directive: positive responses for the person with ASD (e.g., If I want to say something in class, I can raise my hand and wait for the teacher to call my name before talking.)
- Read before targeted social situation

http://carolgraysocialstories.com
Social Narratives: Power Cards

- Uses an individual’s high interest character to show how to act in specific social situations.
- Clearly defines how the individual can also use the same behaviors in similar situations.

Percy loves to watch show and tell. He says that during show and tell you should look with your eyes, not your hands.
Types of Video Modeling

- **Video Modeling**: record a model (peer, teacher, sibling) is recorded doing a targeted behavior, then the learner with ASD watches the video and is encouraged to copy the behavior.

- **Video Self Modeling**: record the learner with ASD doing targeted behavior and edit out undesired behaviors.

- **Point-of-View Video Modeling**: videoed from the learner’s perspective as if watching him/herself perform the behavior.

- **Video Prompting**: break down steps for a sequence of skills; during pause between steps, the learner performs each step until sequence is finished.
Social Thinking Is…

- “A language and cognitive-based *methodology* that focuses on the dynamic nature of social interpretation and social communication skills, both of which require social problem solving.”

- Used to translate evidence-based concepts into conceptual frameworks, treatment frameworks, strategies, curricula, activities, and motivational tools
Social Thinking Is Based on...

Theoretical Concepts

- Joint Attention
- Theory of Mind
- Executive Functioning
- Social Behavioral Learning
Social Thinking Is Made Up Of…

- Visual Supports
- Visual Modeling
- Naturalistic teaching
- Self-management
- Positive Behavior Intervention and Supports (PBIS)
- Cognitive Behavioral Therapy (CBT)
EBP Vs PBE

- Visual Supports
- Visual Modeling
- Naturalistic teaching
- Self-management
- Positive Behavior Intervention and Supports (PBIS)
- Cognitive Behavioral Therapy (CBT)
# Research to Frameworks to Practice

**Social Thinking® Layers of Evidence**

<table>
<thead>
<tr>
<th>Layer 1</th>
<th>Research-Based Theoretical Concepts</th>
</tr>
</thead>
</table>
| ![Brain Icon] | Joint Attention  
Theory of Mind  
Executive Functioning  
Social Emotional Learning  etc. |

<table>
<thead>
<tr>
<th>Layer 2</th>
<th>Conceptual Frameworks</th>
</tr>
</thead>
</table>
| ![Brain Icons] | ILAUGH Model  
Cascade of Social Attention  
ST- Social Learning Tool  
ST- Social Communication Profile  
Levels of the Social Mind  etc. |

<table>
<thead>
<tr>
<th>Layer 3</th>
<th>Treatment Frameworks</th>
</tr>
</thead>
</table>
| ![Brain Icons] | I have a thought; You have a thought  
Social Behavior Mapping  
4 Steps of Communication  
4 Steps of Perspective Taking  etc. |

<table>
<thead>
<tr>
<th>Layer 4</th>
<th>Strategies (for Intervention)</th>
</tr>
</thead>
</table>
| ![Brain Icons] | Who knows what I know?  
Social Thinking Vocabulary  
- Think with eyes  
- Body in the group  
- Expected/Unexpected  etc. |

<table>
<thead>
<tr>
<th>Layer 5</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Children Icons]</td>
<td>Individual activities for teaching strategies (literally thousands)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Layer 6</th>
<th>Motivational/Developmental Tools</th>
</tr>
</thead>
</table>
| ![Tools Icon] | Superflex Curriculum series  
Incredible Flexlike You  
Social Fortune/Social Facts  etc. |
Specific Strategies of the Social Thinking® Approach

by Michelle Garcia Winner and Pamela Crooke, Copyright 2008
Whole Body Listening!

Larry wants to remind you to listen with your entire body

- Eyes = Look at the person talking to you
- Ears = Both ears ready to hear
- Mouth = Quiet- no talking, humming or making sounds
- Hands = Quiet in lap, pockets or by your side
- Feet = Quiet on the floor
- Body = Faces the speaker
- Brain = Thinking about what is being said
- Heart = Caring about what the other person is saying
Specific Strategies of the Social Thinking® Approach

TEACHING SOCIAL THINKING IN PRESCHOOL AND EARLY ELEMENTARY

The Incredible Flexible You™ Curriculum

By Ryan Hendrix, Kari Zweber Palmer, Nancy Tarshis, and Michelle Garcia Winner
The Incredible Flexible You™

- Curriculum for children ages 4-7

- Language-based approach for children with average to strong language and learning abilities.

- Uses linked storybooks and lesson plans to teach Social Thinking vocabulary
  - Books contain teaching moments throughout
  - Lesson plans include activities, dramatic play, and music
Specific Strategies of the Social Thinking® Approach:

Superflex

Superhero Social Thinking Curriculum

Stephanie Madrigal and Michelle Garcia Winner

(2008)

www.socialthinking.com
The Superflex Curriculum

Provides parents and educators with a fun, motivating, and non-threatening way for children to explore social thinking.

This curriculum is designed to teach younger children how to regulate their behaviors and become stronger problem solvers.

It helps children learn about their own inner Superflex and teaches them confidence in their ability to be super-heroic flexible social thinkers!
Cognitive-Behavioral Interventions

Cognitive-behavioral interventions:
• Evidence-based practice for treating anxiety and mood-related concerns
• Can be adapted for individuals with developmental disabilities, such as ASD
• Better suited for individuals with well developed cognitive reasoning skills

Facing Your Fears (Reaven et al., 2012):
• Group cognitive-behavioral intervention
• Focuses on emotion education, coping skills, and exposure therapy
• Parent training component

Other support tools:
• Incredible 5-Point Scale (Buron et al., 2003)
• Zones of Regulation (Kuypers, 2011)

Source: Wood et al. (2009); Storch et al. (2013)
The Incredible 5 Point Scale

- A cognitive behavior technique to help students learn about personal behavior, emotions and self-control.

- Teaches Self-Awareness – sensory, emotions, behavior, coping techniques. Can help adults more deeply understand the needs of the child so they can assist with teaching self-control, self-calming strategies.

- Blends well with Social Behavior Map.

The Five Point Scale
The Zones of Regulation

Big problem/Little problem?

- Scale 1-10 or 1-5 visual.
- List what type of problem is 10, 5, 1.
- Discuss descriptions of problems and determine where they fit on scale.
- Define what makes a problem big or small.
- What types of emotions are associated with different levels of problems?
- Discuss how different problem levels impact a situation over time.
- Discuss how to sort out and analyze that little problem.
- Discuss own emotions.
Calming Strategies

- Sit down and close your eyes. Relax!
- Imagine you have a turtle shell to protect you.
- Talk to a friend and share your feelings.
Take Aways

• Pay attention to the behaviors you want more of.

• Behavior has a function. Find out what need the behavior is meeting and help the child meet the need in a more appropriate way.

• Positive behavior strategies include teaching new skills using supports like visual cues and social stories as well as environmental strategies like the use of calm down spaces.
Questions?

Email: MillerKy@ohsu.edu
Building Your and Caregivers’ Awareness Skills

- **National Program:**
  - Learn the Signs. Act Early. (LTSAE; CDC)

- **State Programs:**
  - Be Early (Part C)
  - Office of Early Learning/Pre-K (Part B)
  - Oregon Act Early (actearlyoregon.org)
CDC Autism Case Training

Individual Modules

- Identifying
- Diagnosing
- Managing

- Online Course Available
- CE credit

Learn the Signs. Act Early.
www.cdc.gov/ncbddd/actearly
Web Resources

- CDC Learn the Signs/Act Early
  - [www.cdc.gov/ncbddd/actearly/concerned/html](http://www.cdc.gov/ncbddd/actearly/concerned/html)

- Oregon Act Early
  - [www.actearlyoregon.org](http://www.actearlyoregon.org)

- American Academy of Pediatrics
  - [http://www.aap.org/healthtopics/autism.cfm](http://www.aap.org/healthtopics/autism.cfm)

- Autism Speaks ASD glossary
  - [http://www.autismspeaks.org/](http://www.autismspeaks.org/)

- CSBS Infant/Toddler Checklist & Scoring, ASD glossary
  - [http://firstwords.fsu.edu](http://firstwords.fsu.edu)
Resources

- **Talking to Parents About Autism**
  - an excellent 15 min video via YouTube by Autism Speaks
  - [www.autismspeaks.org/whatisit/talking_to_parents_action_kit.php#top](http://www.autismspeaks.org/whatisit/talking_to_parents_action_kit.php#top)
  - also includes an “action kit” with handouts for early care and education providers to talk with parents about developmental screening

- **Caring for children with autism spectrum disorders: a resource toolkit for clinicians**
  - Retrieved September 23, 2012, from American Academy of Pediatrics website:
  - [http://www2.aap.org/publiced/autismtoolkit.cfm#id](http://www2.aap.org/publiced/autismtoolkit.cfm#id)
Resources

- Modified Checklist for Autism in Toddlers
  - Retrieved September 25, 2012, from Autism Speaks and Hearing Association website:
    - [http://www2.gsu.edu/~psydlr/Diana_L_Robins_Ph.D..html](http://www2.gsu.edu/~psydlr/Diana_L_Robins_Ph.D..html)

- American Academy of Pediatrics
  - [http://www.aap.org/healthtopics/autism.cfm](http://www.aap.org/healthtopics/autism.cfm)

- National Professional Development Center on Autism Spectrum Disorders (24 evidence-based practices, training modules, online course)
  - [http://www.fpg.unc.edu/~autismmpdC/](http://www.fpg.unc.edu/~autismmpdC/)
Resources

- The Iris Center, Vanderbilt University, Functional Behavioral Assessment
  https://iris.peabody.vanderbilt.edu/module/fba/challenge/#content

- Behaviorbabe.com video on Functions of Behavior,
  http://www.behaviorbabe.com/functions-of-behavior
Resources

- Zones of Regulation, https://www.socialthinking.com/
- Do 2 Learn, http://www.do2learn.com/