THINKING DIFFERENTLY

Social Cognition and Social Motivation of Students With Autism Spectrum Disorders

CENTER FOR AUTISM AND RELATED DISABILITIES
UNIVERSITY AT ALBANY State University of New York
Objectives

- Describe latest research relevant to the way individuals with ASD process social information and engage socially
- State challenging behaviors that students may display related to how they differently process information and implications of these behaviors
- Identify strategies that can be used to teach adaptive skills to replace the challenging behaviors.
Social Cognition

• Cognitive processes that play a role in social behavior
• Joint attention
• Recognizing that others have different perspectives (Theory of Mind) and the effect this has on social behavior
• Social cues

(T. Smith, 2012)
Typical Child Development of Social Cognition

- **9 months** – “Do you see what I see?”
- **2 years** – referencing, modeling, integrating information about the world and how it functions in the social arena
- **4 years** – development of understanding that others might feel sad, although “I” don’t; development and refinement of bigger picture of the world
- **8-12 years** – increase in pro-social skills/self-regulation; develop understanding for central elements of what determines friendships and greater feeling of loneliness

(Bauminger & Kasari, 2000)
The Relationship Between Faces and Social Development

- Babies are born to connect with other humans
- Preference for human like faces at 9 min. old
- Can imitate facial movement at 42 min. old
- Day 2 - infants recognize mother’s face
- Attending to human faces forms the foundation for social development

(J. McPartland video)
Individuals with ASD

- Impairments in social interaction is one of the diagnostic criteria and may include:
  - deficits in nonverbal behavior
  - failure to acquire developmentally appropriate peer relations
  - lack of spontaneous seeking to share enjoyment/interests
  - lack of social/emotional reciprocity
Social Strengths Observed in Many Children with ASD

- Lack of “social” games
- Honesty/Non-judgmental
- Pure and unconditional caring
- Loyalty to friends/family
- Trustworthy/Genuine
- Individuality
- Logical thinkers – decisions aren’t emotional

(S. Shore, Autism Speaks, 2010)
SOCIAL DEVELOPMENT

Interest in people → Attending to people → Thinking and Learning about people → Social Expertise

Interest in things → Attending to things → Thinking and Learning about things → Non-Social Expertise

Adapted from Yale Child Study Center video
March 10, 2010
Youtube
Social Motivation

An incentive or drive resulting from a socio-cultural influence that initiates behavior toward a particular goal

- TD infants preferred social stimuli when shown videos (Legerstee et al., 1998)
- ASD infants showed decreased motivation to attend to social stimuli (Dawson et al., 1998)
  - Birthday party studies - reduced attention to faces, decreased pointing/showing, failure to orient to own name
Social Motivation Theories

- Transactional process that leads to development of neural systems that support social information processing
- Biologically based attenuation of motivation for social engagement
- Decreased experiences negatively impact development of neural systems
Critical Points in Social Motivation Theories

- Deficits stem from a disruption of normative experience-expectant neurodevelopmental processes
- Subsequent atypical development of more complex brain systems that serve social-emotional/social-cognitive skill development
Face Processing

Behavioral and electrophysiological studies:
- Impaired face discrimination/recognition
  - Face vs. non-face memory
- Use of atypical strategies to process faces
  - Reduced attention to eyes
  - Piecemeal rather than configural strategies
- Slower speed of processing faces

(Dawson, G., Webb, S.J. and McPartland, J.)
Social Information Processing Network
Early disruption of reward circuitry causes infants to find social stimuli less rewarding
- less time attending to faces and voices
Failure to develop expertise for processing social stimuli
Abnormal brain circuitry occurs
The Social Motivation Theory and Face Processing

- **Social Motivation**
  - Decreased in autism

- **Attention to faces**
  - Decreased attention to faces, especially eyes

- **Development of Expertise**
  - Decreased expertise in:
    - Configural processing
    - Face discrimination/recognition

- **Brain function**
  - Cortical Specialization
    - Atypical regional specialization
  - Efficiency - Information processing

*Impairments in autism noted in italics*

(Adapted from Developmental Neuropsychology)
Social Motivation Model
Schultz and Colleagues

• Origins traced to social-orienting impairment driven by early abnormalities in amygdala
• Failure to attend to faces because they are not emotionally salient
• Neuro-imaging studies showed hypo-activity of amygdala and fusiform face area

(R. T. Schultz, 2004)
Perceptual Biases for Faces at Birth + Learning* during Infancy

Influenced by Amygdala Functions

Leads to Enhanced “Salience” of Faces

Leads to More Experience with Faces & Greater Perceptual Skill

Influenced by FFA Functions

Provides the Scaffolding (“language of faces”)

Other factors of influence

Social Skill Development

Regulated by multiple brain areas, including the fusiform-amygdala system

* A combination of associative & instrumental learning

---

Int. J. Devl Neuroscience 23 (2005) p.135, fig. 3
Social Motivation Model
Klin and Colleagues

• TD children have a preference for biological movement – eyes, gestures, etc.
• In studies, ASD children focus on mouth while viewing faces
• Used pat-a-cake video using motion capture technology
• Surprising results

(Klin, A. et al, 2009)
Pat-a-Cake Video
Eye-Tracking During Discussion

The figure shows eye-tracking data from children watching different types of videos: one with a toddler with autism, another with a typically-developing toddler, and a third with a developmentally-delayed toddler. The pattern of eye-tracking is shown in different quadrants, indicating how the children are focusing on different parts of the video.
Pat-a-Cake

Klin. Lin, Corinno, Ramsay, & Jones, 2009

video presented to children
toddler with autism
typically-developing toddler
developmentally-delayed toddler
Audio-Visual Synchrony
Motion Capture Study
Conclusions

- ASD children attended to hand clapping about 90% of time
- Audiovisual synchrony focus
- Missed socially rich experience adversely affects course of development
- Genetic predispositions are exacerbated by atypical experiences
What is Joint Attention

• An early social-communicative behavior in which two people share attentional focus on an object or event, for the sole purpose of sharing that interesting object with each other

Social Motivation Model
Mundy and Colleagues

• Joint Attention – how and WHY
• Inherent biological differences in sensitivity to social reward – motivation
• Decreased tendency to spontaneously orient to social stimuli
• Impacts tendency to initiate or share social attention coordination with others

(D. Cichetti & M. Gunner)
Joint Attention

www.youtube.com/watch?v=tif4U3OjT2M
Joint Attention and Learning

- Opportunities provided by initiation
  - both child and caregiver
- Incidental learning & referential mapping
- Depth of processing information
  - Eye contact during picture observation

(D. Cichetti & D.J. Cohen)
Joint Attention Deficits

- *Initiating* joint attention and *responding* to someone else can be affected
- Integration of point, gaze and facial orientation on a continuum from non-existing to more skilled
  - Lack of commenting or social pointing (protodeclarative, e.g., pointing to a clown making funny faces)
  - Pointing at objects (protoimperative, e.g., pointing to the cookie jar) to some extent present
Joint Attention Deficits Classroom

- Joining into discussion without providing background information (overlooks joint reference point)
- Looking away while responding can be perceived as non-compliance
- Less positive affect or inappropriate facial expression may give the impression of aloofness and being uninvolved
Joint Attention Deficits Classroom

- Communication may be behaviorally regulated (i.e., requesting or protesting) rather than socially driven
- Approach adults more than peers
- Respond less often to the approaches of others
- May be more content when left alone

*Only 8% of students with autism experience friendships involving mutually responsive and reciprocal activities* (Lord, 1994)
Social Cognitive Theory

- Impairments in ability to represent/reason about thoughts, beliefs, feelings of others (Theory of Mind)
- Looks at behavioral, cognitive and environmental influences
- Considers possible disturbance in “social brain” systems

(D. Fein, 2011)
Theory of Mind (ToM)

• Understanding that we all have different beliefs, knowledge and minds
• Ability to see that others have thoughts and feelings which impact their actions

(D. Fein, 2011)
Link Between ToM and Social Deficits

• Emerging skills are delayed by 2 yrs. old in many toddlers with ASD
  -Shared attention via gaze following
  -Imitation of intentional actions
  -Preference for human face/voice

• Skills compromised by lack of social input vital to development

(D. Fein, 2011)
Robert Seyfarth
Theory of Mind

www.youtube.com/watch?v=XDtlSa50uk
ToM and Pragmatic Social Skills

This is Sally.

This is Anne.

Sally has a basket.

Anne has a box.

Sally has a marble. She puts the marble into her basket.

Sally goes out for a walk.

Anne takes the marble out of the basket and puts it into the box.

Now Sally comes back. She wants to play with her marble.

Where will Sally look for her marble?
False-Belief Test Con’t.

- What about 20% of ASD students who passed?
- Most “Passers” unable to demonstrate abilities in real life social situations
- Skills impaired relative to age and developmental level
- Possible inability to use strategies outside of a highly structured, artificial environment

(U. Frith, F. Happe & F. Siddons, 1994)
Joint Attention and Theory of Mind

• Joint attention skills - understanding of others as intentional agents
• Precursor to more advanced social cognitive skills
• Joint attention predicts ToM performance, prosocial behavior and play with peers

(D. Cichetti & M. Gunner, 2012)
Theory of Mind Impact on Socialization

- Inappropriate responses
- Inability to see that behavior affects how others think and feel about you
- Challenges in using imagination
- Difficulty with empathy and compassion
Theory of Mind
Impact on Communication

• Failure to view conversation as means of modifying and extending information
• Limited understanding of metaphors, sarcasm, jokes and irony
• Limited understanding of pragmatics of language
• Lack of seeking/sharing attention, providing new information, expressing intentions or choice making

(U. Frith, F. Happe & F. Siddons, 1994)
Theory of Mind
Perspective Taking
Missing Social Cues

Non-verbal information about the environment and social partners

1. May appear disrespectful or annoying when interacting
2. Overly focused on details (sticking to the rule no matter what)
Missing Social Cues

Unaware of social requirements:
• private versus public
• “who” they are talking to
• what is/isn’t appropriate to say in a certain situation
• timing
• perseverance on a topic
The Joys of Disregarding Social Cues and Boring Choreography

www.youtube.com/watch?v=oAtl3-JCYio
Consequences of Social Cognitive Deficits

- Emotional vulnerability
- Risk of being bullied or victimized
- Limited ability to make friends
- Poor coping and problem solving strategies
- Can challenge social roles and conventions
- May find the pressures of social interaction distressing (not motivated by social interactions or teacher’s expectations)
- Not able to develop a social prototype
Beware

• Students with ASD often look “typical”
• Misinterpreted as “spoiled”, “manipulative” or being “defiant” and “troublemakers”
• Students with ASD may possess many strengths:
  -- excellent rote memory
  – attention to detail
  – strong ethics code
  – strong visual memory
  – strong perceptual discrimination
  – strong knowledge in a particular area of interest
  – challenge social rules and norms
  – less susceptible to an illusion
Social Motivation Theory
OR
Social Cognitive Theory

• Both rooted in disruption in biological processes required to develop social proficiency
• Motivation theory may actually shed light on nature of social cognitive deficits
• Social cognitive deficits may be a consequence of disrupted social interest

(Chevallier, Kohls, Troiani, Brodkin and Schultz, 2012)
Effective Social Skills Instruction

- Increase dosage of social skills interventions
- Provide the instruction within the child’s natural setting
- Match the intervention strategy with the type of deficit
- Ensure intervention fidelity

Bellini, Peters, Benner, and Hopf (2007)
5 Step Model of Social Skills Instruction

1. Assessing Social Functioning
2. Lack of “Know How” vs. Lack of Social Interest
3. Selecting Intervention Strategies
4. Implement the Intervention
5. Evaluating and Monitoring Progress

Step 1: Assessing Social Functioning

- Interview Forms
  - Parent/Child/Teacher (Bellini, 2008)

- Rating Scales
  - Standard/nonstandard

- Observation
  - Naturalistic vs. structured
  - Norm-referenced
<table>
<thead>
<tr>
<th>Name and Author</th>
<th>Age Range</th>
<th>Method of Administration</th>
<th>Time</th>
<th>Subscales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autism Social Skills Profile (ASSP)</td>
<td>6-17</td>
<td>49 items rated on a 4-point Likert scale</td>
<td>15-20 min.</td>
<td>Social, Reciprocity&lt;br&gt;Social Participation/Avoidance&lt;br&gt;Detrimental Social Behaviors</td>
</tr>
<tr>
<td>Bellini, 2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profile of Social Difficulty (POSD)</td>
<td>6-11</td>
<td>6-point Likert Scale Self-report available</td>
<td>15-20 min</td>
<td>Fundamental Skills&lt;br&gt;Social Initiation Skills&lt;br&gt;Social Response Skills&lt;br&gt;Getting Along with Others</td>
</tr>
<tr>
<td>Coughouvanis, 2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Responsiveness Scale (SRS)</td>
<td>4-18</td>
<td>65-item parent/teacher questions 4-point Likert scale</td>
<td>15-20 min</td>
<td>Social Awareness&lt;br&gt;Social Cognition&lt;br&gt;Social Communication&lt;br&gt;Social Motivation&lt;br&gt;Autistic Mannerisms</td>
</tr>
<tr>
<td>Constantino &amp; Gruber, 2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Skills Improvement System (SSIS)</td>
<td>3-18</td>
<td>Parent, teacher, child forms</td>
<td>10-25 min</td>
<td>Social Skills Scale&lt;br&gt;Problem Behaviors Scale&lt;br&gt;Academic Competence Scale</td>
</tr>
<tr>
<td>Gresham &amp; Elliot, 2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scales of Independent Behavior Revised (SIB-R)</td>
<td>Inf-80</td>
<td>Structured interview of checklist</td>
<td>15-20 min (short form) 45-60 min (full scale)</td>
<td>14 areas of adaptive behavior 8 areas of problem behavior</td>
</tr>
<tr>
<td>Walker McConnell Scales of Social Competence and School Adjustment</td>
<td>Grades 7-12</td>
<td>Teacher ratings of frequency with which social skills occur across 53 items</td>
<td>10 min</td>
<td>Self-control&lt;br&gt;Peer Relations&lt;br&gt;School Adjustment&lt;br&gt;Empathy</td>
</tr>
<tr>
<td>Walker &amp; McConnell (1992)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vineland Adaptive Behavior Scales 2nd Edition</td>
<td>0-90</td>
<td>Survey, interview, parent &amp; teacher rating Expanded interview</td>
<td>Survey and parent rating (20-60 min) Teacher rating (20 min) Expanded interview (25-90 min)</td>
<td>Communication&lt;br&gt;Daily Living Skills&lt;br&gt;Socialization&lt;br&gt;Motor Skills&lt;br&gt;Maladaptive Behavior Index</td>
</tr>
<tr>
<td>Sparrow, Ciccetti, &amp; Balla, 2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Step 2: Lack of “Know How” vs. Lack of Social Interest
Lack of “Know How” vs. Lack of Social Interest

- **Skill Acquisition Deficit**: Does not possess skills
  - Intervention: teach skills
- **Performance Deficit**: possess skill, but does not perform the skill
  - Intervention: enhance performance

Be careful not to assume that lack of performance is a performance deficit!
Questions to Ask to Help Distinguish Between Skill Deficit and Performance Deficit

– Does the child perform the skill across multiple settings?
– Does the child perform the skill without support or assistance?
– Does the child perform the skill fluently and effortlessly?
– Does the child perform the skill when the reinforcement is provided?
– Does the child perform the skill when environmental modifications are made?
Step 3: Select Interventions

Remember to match intervention strategy to type of skill deficit

- Skill Acquisition Deficit
- Performance Deficit
Step 3: Select Interventions

The National Autism Center’s National Standards Report

• Comprehensive review of scientific evidence in support of educational/behavior treatments for ASDs

• Review of literature of treatments that target characteristics and symptoms of ASD published between 1957 and 2007

http://www.nationalautismcenter.org/nsp/
Step 3: Select Interventions

The National Autism Center’s National Standards Report

- Provides information about treatment effectiveness based on age, diagnostic groups, and treatment targets
- Strength of Evidence Classification System: Established, Emerging, Unestablished, Ineffective/Harmful

http://www.nationalautismcenter.org/nsp/
JOINT ATTENTION INTERVENTION

“These interventions involve building foundational skills involved in regulated the behaviors of others. Joint attention often involves teaching a child to respond to the nonverbal social bids of others or to initiate joint attention interactions. Examples include pointing to objects, showing items/activities to another person, and following eye gaze.”

- EVIDENCE LEVEL: ESTABLISHED
- SKILLS INCREASED: COMMUNICATION; INTERPERSONAL
- AGES: 0-2; 3-5
Teaching Joint Attention

• Use naturalistic, motivational procedures such as Pivotal Response Training

• Using highly preferred interests in learning opportunities may be used as intrinsically motivating rewards to teach new pivotal responses

• Highly preferred interests may be effective in engaging child in interaction and tapping into motivation to share interesting objects with others

Vismara & Lyons, 2007
“These interventions rely on an adult or peer providing a demonstration of the target behavior that should result in an imitation of the target behavior by the individual with ASD. Modeling can include simple and complex behaviors. This intervention is often combined with other strategies such as prompting and reinforcement. Examples include live modeling and video modeling”

- EVIDENCE LEVEL: ESTABLISHED
- SKILLS INCREASED: COMMUNICATION; HIGHER COGNITIVE FUNCTIONS; INTERPERSONAL; PERSONAL RESPONSIBILITY; PLAY
- AGES: 3-5; 6-9; 10-14; 15-18
Video Modeling

Involves the child observing a videotape of a model engaging in a target behavior and subsequently imitating that behavior.

Can be used with peers, siblings, adults or self as a model.

Peer Modeling:
Watch Me Learn (commercial) [http://www.watchmelearn.com](http://www.watchmelearn.com)
Model Me Kids (commercial) [http://www.modelmekids.com](http://www.modelmekids.com)
Video Modeling

- Video Self-Modeling (VSM) is a specific application of video modeling that allows the individual to imitate targeted behaviors by observing her/himself successfully performing the behavior.

Self-Modeling:

- **Positive Self-review**: reinforcing already known skills to improve performance/fluency.
- **Feed-forward**: Video of skills not yet learned. Introducing a new skill or behavior.
Leon

Moving On
Starring
Leon & Deon
PEER TRAINING PACKAGE

“These interventions involve teaching children without disabilities strategies for facilitating play and social interactions with children on the autism spectrum. Peers may often include classmates and siblings. Common names for intervention strategies include peer networks, circle of friends, buddy skills package, Integrated Play Groups, peer initiation training, and peer-mediated social interactions.”

• EVIDENCE LEVEL: ESTABLISHED
• SKILLS INCREASED: COMMUNICATION; INTERPERSONAL; PLAY
• AGES: 3-5; 6-9; 10-14
Peer Mediated Instruction Interventions (PMII)

PMI is designed to increase the social engagement with peers for children and youth with ASD. Specifically, the goals of PMII are to:

- Teach peers ways in which they can talk and interact with children and youth with ASD
- Increase the frequency with which children and youth with ASD interact with typically developing peers
- Extend peers' social initiations with students with ASD across activities in the classroom
- Minimize teachers'/adults' support (e.g., prompts and reinforcement)
- Promote interactions between typically developing peers and students with ASD that are both positive and natural in quality

www.autisminternetmodules.org
PMI: Steps for Implementation

1. Selecting Peers
2. Training Peers
3. Supporting Peers

http://www.youtube.com/watch?v=5vc1Kc7D2nY

www.autisminternetmodules.org
PMI: Steps for Implementation

4. Implementing in Classroom and Throughout the Day
5. Extending Initiations Across the Day

http://www.youtube.com/watch?v=7uqECpplbAs
Module: Peer-Mediated Instruction and Intervention

Sample Progress Monitoring Form: PMII Activity Observation for Older Children and Adolescents

Date: ____________________________  Time: ____________________________

Observer: ____________________________

Focal student present: ____________________________

Peers present: ____________________________

Activity: ____________________________

Activity:

1. Did the students participate in the activity after your introduction?  
   [ ] Yes  [ ] No

2. Did the students seem to enjoy the activity?  
   [ ] Yes  [ ] No

3. Did the activity contain materials that promoted social interaction?  
   [ ] Yes  [ ] No

4. Did the activity promote positive or negative social interactions?  
   [ ] Yes  [ ] No

5. What changes should be made in the arrangement of the intervention setting to improve social interactions (e.g., materials used, introduction to the activity)?

PMII Module 7-23-2008
National Professional Development Center on ASD
EPIC Child Development Institute
“These treatments involve a written description of the situations under which specific behavior are expected to occur. Stories maybe be supplemented with additional components (e.g., prompting, reinforcement, discussion, etc.). Social Stories are the most well-known story-based intervention and they seek to answer the ‘who,’ ‘what,’ ‘when,’ ‘where,’ and ‘why’ in order to improve perspective-taking.”

- EVIDENCE LEVEL: ESTABLISHED
- SKILLS INCREASED: INTERPERSONAL; SELF-REGULATION
- AGES: 6-9; 10-14
Power Cards:
Using Special Interests to Motivate Children and Youth with Asperger Syndrome and Autism
Elisa Gagnon

• Incorporates special interests in social interactions
• Written in first person
• Serves a motivator
• Capitalizes on relationship between individual with ASD and the hero/role model
Help will always be given
to those who ask for it
Example

When Matt says 'How ya doing Dog?' he is treating me like one of the guys. He is trying to be friendly. He is just joking around. He doesn’t think I look like a dog. Next time I see him I’ll smile and say, "How ya doing Dog?" to him.
COGNITIVE-BEHAVIORAL INTERVENTION PACKAGE

“These interventions focus on changing everyday negative and unrealistic thought patterns and behaviors with the aim of positively influencing emotions and/or life functioning.”

• EVIDENCE LEVEL: EMERGING
• SKILLS INCREASED: INTERPERSONAL
• AGES: 6-9; 10-14; 15-18
“Thinking About YOU Thinking About ME”

- Uses Cognitive Behavioral strategies to teach social thinking concepts
- How understanding the perspectives of others is the foundation of interpersonal relationships
- How to address specific deficits in this area
- The four steps of communication - enhancing perspective-taking
- Cost: $48.00
“Thinking About YOU Thinking About ME”
4 Steps of Communication

1. Thinking about others and what they are thinking about us
2. Establish a physical presence
3. “Thinking with our eyes”
4. Use language to relate to others
“Thinking About YOU Thinking About Me”

Visual Web of What You Remember about Others

Name of person you are getting to know

- Things he likes to do
- Information about his school or job
- Information about his family
- Types of food or restaurants he likes
How we make a Friend File

Meet a new person

Small Talk and Conversations:
We learn information about another person.

We SAVE information in a “Friend File” in our brain

We see the person again . . .
Remember your Friend File
Ask Questions about things you know about them

Make your Friend File bigger
Ask Follow-up questions
Using Friend File information shows interest in the other person

You are building a FRIENDSHIP!
“Think Social! A Social Thinking Curriculum for School-Age Students”

www.socialthinking.com

• Uses Cognitive Behavioral strategies to teach social thinking concepts
• Provides step-by-step methods for teaching social-cognitive and communicative skills
• Lessons span from K-12 and into adulthood
• Cost: $84.00
### “Think Social!” Example

#### Deciphering Language Meaning

<table>
<thead>
<tr>
<th>What were people thinking?</th>
<th>Words said</th>
<th>Body language that helps to explain</th>
<th>Setting that gives information about what is happening</th>
</tr>
</thead>
<tbody>
<tr>
<td>People are thinking about a dance they are organizing</td>
<td>“We are having a ball.”</td>
<td>Serious facial expressions, calm body, calm tone of voice</td>
<td>Sitting in a meeting room with other ppl while trying to draft details for a dance</td>
</tr>
<tr>
<td>People are thinking that it’s fun to be together</td>
<td>“We are having a ball.”</td>
<td>Happy faces, excited bodies, high or loud tone of voice</td>
<td>Doing a fun activity together</td>
</tr>
<tr>
<td>People are thinking they are bored and frustrated</td>
<td>“We are having a ball.” (Sarcasm)</td>
<td>Unhappy faces, tired or bored looking bodies, soft or bored tone of voice</td>
<td>Doing a work project or a chore that ppl don’t really like to have to do</td>
</tr>
</tbody>
</table>
SCRIPTING

“These interventions involve developing a verbal and/or written script about a specific skill or situation which serves as a model for the child with ASD. Scripts are usually practiced repeatedly before the skill is used in the actual situation.”

• EVIDENCE LEVEL: EMERGING
• SKILLS INCREASED: COMMUNICATION; INTERPERSONAL
• AGES: 6-9; 10-14
Social Scripts

Let’s draw together.

This is fun!

Wow, that’s good.

Which color do you want?

You’re doing a good job.

Sophie, I like your picture.

Thanks for drawing with me.
Social Scripts – How To Implement Scripts

• Step 1: Choose social or communication skills to target
• Step 2: Write the scripts
• Step 3: Teach the script
• Step 4: Implement the scripts during the chosen scenario
• Step 5: Fade the script
Social Scripts – Fading the Script

Let’s draw together
Let’s draw
Let
THEORY OF MIND TRAINING

“These interventions are designed to teach individuals with ASD to recognize and identify mental states (i.e., a person’s thoughts, beliefs, intentions, desires, and emotions) in oneself or in others and to be able to take the perspective of another person in order to predict their actions.”

• EVIDENCE LEVEL: EMERGING
• SKILLS INCREASED: HIGHER COGNITIVE FUNCTIONS
• AGES: 6-9; 10-14
Teaching Children with Autism to Mind Read (Howlin, Baron-Cohen, & Hadwin, 2008)

- How to interpret facial expressions
- How to recognize feelings of anger, sadness, fear and happiness
- How feelings are affected by what happens and what is expected to happen
- How to see things from another person’s perspective
- How to understand another person’s knowledge and beliefs
Teaching Emotions
(Howlin, Baron-Cohen, & Hadwin, 2008)

Level 1: Recognizing facial expression from photographs
Level 2: Recognizing facial expressions from drawings
Level 3: Identification of situation-based emotions
Level 4: Desire-based emotions
Level 5: Belief-based emotions
Level 3
Example 4
Sad

(Howlin, Baron-Cohen & Hadwin, 2008)
Teaching About Informational States

- Level 1: Simple visual perspective taking
- Level 2: Complex visual perspective taking
- Level 3: Understanding the principle that “see leads to knowing”
- Level 4: Predicting actions on the basis of a person’s knowledge
- Level 5: Understanding false beliefs

(Howlin, Baron-Cohen, & Hadwin, 2008)
Level 2: Complex Visual Perspective Taking

(Howlin, Baron-Cohen, & Hadwin, 2008)
Let’s Face It (LFI)
http://web.uvic.ca/~letsface/letsfaceit/?q=home
Mind Reading Software

http://www.jkp.com/mindreading/

• Explore over 400 emotions, seeing and hearing each one performed by six different people

• Features: Emotions Library, Learning Center, Games Zone

• Users: 4yrs - Adulthood
  – Single user $125
  – Site license $495
PEERS: Program for the Evaluation and Enrichment of Relational Skills

The PEERS program is an evidence-based manualized, parent assisted intervention for teens and adults – the program involves parents as an integral component of the intervention. Parent and teens meet at the same time for 90 minutes each week over 14 weeks and focus on things like, having a conversation, using electronic forms of communication, choosing appropriate friends, handling teasing – bullying and other forms of social rejection, etc.

• EVIDENCE LEVEL: NEW PROGRAM NOT YET EVALUATED BY NATIONAL STANDARDS REPORT
PEERS: Program for the Evaluation and Enrichment of Relational Skills

- Manualized intervention
- Parent-assisted
  - Concurrent parent and teen sessions
  - Parent handouts provided
  - 14-week curriculum
  - 90 minute weekly sessions
- School-based program
  - Teacher-facilitated
  - Focuses on friendship skills
- Teaches ecologically valid social skills
- Teens in middle and high school
- Young adult program
  - 18-24 years of age
- Cost for manual: $44.96

(Laugeson & Frankel, 2010)
**PEERS Example**

- **Conversation Skills III – Electronic Communication**

<table>
<thead>
<tr>
<th>Reasons You Are Calling</th>
<th>Reasons You Have to Hang Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Just calling to see how you’re doing.”</td>
<td>“I have to get going.”</td>
</tr>
<tr>
<td>“Just calling to hear what’s up with you.”</td>
<td>“I better let you go.”</td>
</tr>
<tr>
<td>“I’m calling to get the homework.”</td>
<td>“I need to finish my homework.”</td>
</tr>
<tr>
<td>“I haven’t talked to you in a while.”</td>
<td>“I have to eat dinner now.”</td>
</tr>
<tr>
<td>“I was wondering what you’re up to.”</td>
<td>“My mom needs to use the phone.”</td>
</tr>
</tbody>
</table>

(Laugeson & Frankel, 2010)
PEERS Video
Step 4: Implement the Intervention

- Format (individual, group, class wide)
- Selecting peer models (if necessary)
- Assembling and training the team (professionals/students)
- Selecting materials and resources
- Determining where sessions will take place
- Developing the schedule and who is going to implement strategies
Parent Generalization Form

Child: Johnny

Date: October 10th

Skills currently being targeted:
1. Initiating interactions with peers
2. Asking/answering questions from peers
3. Identifying feels

Strategies to enhance performance of the skills at home:
1. Set up play dates with other children
2. Provide prompts for “asking/answering questions” (visual/verbal)
3. Ask Johnny to identify feelings of characters on television/movies
4. Reinforce every attempt

Please share your experiences using these strategies with Johnny – what worked/didn’t work?

------------------------------------------------------------
------------------------------------------------------------
------------------------------------------------------------

Adapted from S. Bellini, 2008
Step 5: Evaluating and Monitoring Progress

- Consider methods as social skill deficits are being identified
- Take baseline data
  - Frequency, duration, latency
- Collect data regarding a variety of settings and people
A Few Things to Remember

• Assess if the individual has a skill deficit or a performance deficit
• Provide interventions in multiple settings
• Use typically developing peers
• Deliver interventions with consistency
  Continually monitor and modify interventions
CARD Albany is now on Facebook
http://www.facebook.com/cardalbany

Required Coursework for Special Education Professionals now online – “Responding to the Needs of Students with ASD”
http://www.albany.edu/autism/NYSEDpage.shtml

Online Distance Learning Training
http://www.albany.edu/training.php
Questions?

Center for Autism and Related Disabilities
Phone: (518) 442-2574 or toll free 1+(866) 442-2574
Email: card@albany.edu
Website: http://www.albany.edu/autism