Behavior management and interventions for unique ASD learning styles

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Objectives

- What are ways to understand the behaviors of individuals with an ASD?
- What are effective intervention techniques for ASD individuals?

Challenges to ASD treatment

- Spectrum of ASD symptoms
- Over past 20 years variety of therapies proposed to improve ASD symptoms.
- Variability of outcomes regardless of type and intensity of intervention

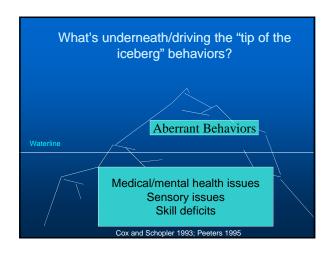
Challenge: Spectrum of Core Symptoms				
AREA	<u>Mild</u>	<u>Moderate</u>	<u>Severe</u>	
Social	Interested but odd	Passive	Aloof	
Communication	Verbal but rigid	Echoes speech	Non-verbal	
Repetitive Behaviors	Somewhat inflexible	Moderately resists change	Extreme resistance to change	
	Infrequent Motor stereotypes	repetitive motor stereotypes	Persistent motor Stereotypes	

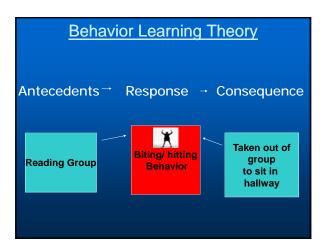
Challenge: Spectrum of					
	Associated Symptoms				
AREA	MILD	<u>MODERATE</u>	<u>SEVERE</u>		
Nonverbal IQ	Gifted to Average	Borderline IQ to mild MR	Moderate to severe MR		
Motor Skills	Agile & Coordinated Fine/gross motor Skills	Some mild to Moderate impairments in fine/gross motor skills	Awkward & Uncoordinated fine/gross motor skills		
Sensory	Mild to no Notable Sensory issues	Moderate sensory issues: hypo or hypersensitivity	Extreme sensory issues: hypo or hypersensitivity		

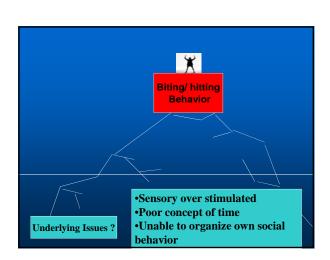
What do we currently know?

- Predominantly, ASD interventions fall within a continuum of behavioral and developmental theoretical models
- ASD intervention targets: promote social, adaptive, and behavioral functioning.
- Treatments derived from behavioral learning theory have strongest research support for ASD population.

(Ospina et al., 2008; Granpeesheh, Tarbox, Dixon, 2009)







Behavior Learning Theory Antecedents Response Consequences Reactive Strategies Natural consequences Proactive Strategies Modify environment **Behavior** Provide visual cues & Remove consequences predictable routines (ignoring) Teach alternative Brief Time Outs until calm Clear Limits/boundaries "First this, then that" Visual Road Map problem-solving Teach calming strategies Consistent follow through Give adult-directed choices of limits set Positive attention of alternative



■ Pictures enhance understanding

ASD Individuals tend to think concretely

 Puts them at risk for responding in inappropriate ways or becoming confused by social situations or social conversations

Challenges (Concrete thinkers)

 Ambiguous rules or rules that don't make sense or are not clear are hard

Rule: "Use deodorant after showering".

Interpretation: "If I don't shower every day, then I don't put on deodorant every day".

2. Prefer familiarity (repetition, routine, consistency)

Interventions for concrete learners

Visual cues for rules, instructions, and routines

Social Stories TM (Gray, 2000)

- Provide social instruction
- Beginning, middle and end
- Worded in the positive rather than stating what "not" to do

Social Stories TM (Gray, 2000)

Key Components

- Descriptive Sentences
 - Sets the stage-event
- Perspective Sentences
 - Thoughts/feelings/reactions of others
- Positive Directive Sentences
 - How to respond
- Partial Sentences blanks to fill in
- One page per concept-clarity/focus

Social Story about Asking Questions (Gabriels & Gaffey In Press)

I like to ask people a question because I like to know the answer.

When I have a question to ask, I will use my quiet voice to ask my question to a person.

Using my quiet voice will help a person listen to my question. I know this person wants to answer my question.

This person will answer my question and draw a picture of the answer on my drawing board.

This picture of the answer will help me remember the answer to my question.

When I want to ask the question again, a person will point to the picture of the answer to help me remember the answer. This will help me know the answer.

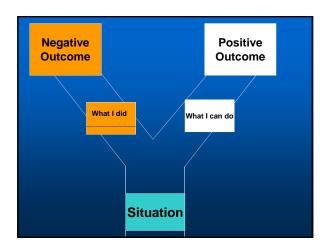
Struggle to understand others' intentions, emotional states, and predict others' behaviors

- ➤ "Mind Blindness" Difficulties with:
 - •Generating possibilities based on available information
 - •Reflecting on how their own behaviors may affect others
 - •Problem-solving ways to change their behaviors to improve their social relationships

Theory of Mind (ToM) (Baron-Cohen, 1995; Baron-Cohen, Tager-Flusberg, & Cohen, 2000)

Intervention Techniques ("mind blindness")

- Social Stories TM (Gray, 2000)
- learn by "doing" or role-play
- Error Correction-Try again
- Highlighting (giving social praise) to appropriate behaviors
- Visual Road Map



Focus on Detail



- See the world in a more narrow way, more intensely focused on details
- Harder to see the "big picture" which is necessary for awareness of concepts, making connections, generalizing, & seeing things in context
- Narrow interests

Intervention Techniques (Over focused on details/interests)

- Role play-notice what was right/wrong
- Road Map
- Cause-and-effect planned ignoring: "First get calm, then I will talk with you"
- Use narrow interests to engage

Problems with distractibility/ Engaging Attention

- Problems processing sensory information (e.g., auditory, tactile, visual, taste)
- Stress decreases ability to process sensory information, causing feeling of threat and avoidance behaviors
- Hard to get their attention (narrow focus/interests)
- Once engaged, they are less likely to disengage (very focused)

Intervention Techniques (Distractible)

- Modify environment to" ↓ sensory distractions or † alertness
- Use special interests to engage in new learning tasks

Difficulties Organizing and Sequencing

- Deficit in executive functions including:
 - Cognitive flexibility
 - An ability to apply social rules flexibly
 - Control impulses
 - Organize
 - Initiate activities (processing speed)
- Also found in (e.g., Schizophrenia, ADHD, Tourettes Syndrome)

(Ozonoff, 1995; Russell, 1997)

TEACCH

(Treatment and Education of Autistic and related Communication- Handicapped CHildren)

 Cognitive-behavioral philosophy: combines behavioral techniques and environmental structure within a developmental framework



TEACCH goals:

Create environments:

- Tailored to the developmental needs individuals with ASD to decrease behavioral problems
- Increase independent behavior & sense of competence
- Improve quality of life for ASD children and their families



TEACCH: 4 Types of Structure 1. Physical Organization 3. Work Systems 4. Visual Structure 1. Physical Organization Specific Intervention Areas that are visually defined Goal: Establish a routine so child begins to associate activities with specific areas/places • Goal: Provides a structure to decrease potential anxiety due to lack of predictability and understanding. ■ Uses: Daily, Mini Activity, Social Events Mechanics: • Alternate more and less preferred or familiar activities · Choose system based on child's cognitive ability level

3. Work Systems

- 1. Provides a systematic strategy to approach work that needs to be completed.
- This learned strategy builds independence and enables child to generalize skills into other environments.

4. Visual Structure

- Provides child with a strategy for approaching the task and using the materials in a flexible manner
- Provides:
 - 1. Visual instructions
 - 2. Visual organization
 - 3. Visual clarity

