



Autism Spectrum Disorders

Virginia Tech Psychosocial Interventions Lab

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Outline of Presentation

- Overview of Autism Spectrum Disorders (ASDs)
- Misconceptions about ASDs
- Increasing Social Skills at Camp
- Hyperactivity
- Difficulties with Transitions
- Difficulties with Aggression
- Sensory Issues
- Tips on Interacting with Children with ASDs
- Case Study Examples
- Questions?

Social Difficulties

A child with Autism may (DSM-IV-TR, 2000):

- Not respond to his or her name
- Have poor eye contact
- Not appear to hear you at times
- Be resistant to cuddling and holding
- But may be inappropriately cuddly as well
- Prefer to play alone
- Have difficulty developing peer relationships
- Have difficulty with “give and take” social interactions
- Not share enjoyment with others

Communication Difficulties

A child with Autism may (DSM-IV-TR, 2000):

- Start talking later than other children or does not speak at all
- Not make eye contact when talking or asking for something
- Speak with an abnormal tone or rhythm – may use a singsong voice or robot-like speech
- Have difficulty starting a conversation or keeping it going
- Repeat words or phrases verbatim
- Have robotic, formal speech
- Have difficulty with metaphors

Repetitive Behaviors/ Restricted Interests

A child with Autism may (DSM-IV-TR, 2000):

- Display repetitive movements: rocking, spinning, hand-flapping
- Have inflexibility related to routines and rituals
 - Become upset when they are changed
- Constantly be on the move
- Be fascinated by parts of an object, such as the spinning wheels of a toy car
- Be unusually sensitive to light, sound and touch
- Have intense or odd interests
- Not know how to engage in pretend play

Misconceptions

- Myth: Children with autism are not affectionate, or do not want to be socially involved

(McKinney, Miller, & Fountain, 2006)



Increasing Social Skills at Camp

- Create opportunities to foster social interaction
- Use a buddy system
- Use other children as cues to indicate what to do
- Encourage cooperative games
- Model how to relate to the child with autism
 - demonstrate tolerance and encouragement
 - acknowledge when other children are being supportive
- Capitalize on restricted interests to provide motivation and encouragement for social interaction

(Koegel, 2004)

Hyperactivity

- Diet
 - Avoid caffeine
 - Reduce sugar intake, and when given, give in small amounts throughout the day, instead of one large amount
- Lots of physical activity
- Make sure you have child's attention when giving directions
- Plan activities in advance, and discuss plan with child

(National Autistic Society, 2008)

Difficulties with Transitions

- Many individuals with autism exhibit problem behaviors when they must transition from one activity to another
- Why are transitions difficult for children with autism?
 - Greater need for predictability
 - Lack of awareness of naturally occurring cues that signal transitions
 - Other possible explanations based on functional assessment

(Sterling-Turner & Jordan, 2007)

Difficulties with Transitions

- Techniques to ease transitions
 - Use verbal or other auditory cues to signal upcoming transitions
 - Behavioral momentum
 - Picture cues
 - Activity schedules
 - Introduce child to **upcoming activities** in advance
 - Show videos, use pictures, discuss
 - Introduce child to **new environments** in advance
 - Do not transition to next activity until everything is set up and ready for that activity

(Sterling-Turner & Jordan, 2007)

Difficulties with Aggression

- Important to remember: 75-80% of disruptive behaviors are attempts to communicate
- When a meltdown occurs:
 - Don't panic
 - Keep everyone safe
 - Wait it out
 - Keep your distance
 - Remember that you can't teach anything when the child is having a tantrum
(Koegel & LaZebnik, 2004)
 - To de-escalate behavior:
 - Lower your body, voice, and language
 - Slow down your breathing rate, speech, and movements
 - Don't ask "why" questions
 - Listen, without jumping to fixing or problem-solving
 - Wait until child is calm to talk about consequences or reparations

Difficulties with Aggression

- Figuring out why the problem behaviors are occurring
 - Examine when and where the behaviors occur
 - Note what happened right before the behavior started
 - Note what happened right after the behavior
 - Form hypotheses about when, where, and why the behavior occurs
 - Are there warning signs that the negative behaviors are about to start?
 - Are there environments in which the behaviors are more likely to occur?
 - Make sure there is no physical cause for the behavior

(Koegel & LaZebnik, 2004)

Difficulties with Aggression

- Don't punish the bad behavior
- Praise good behavior
- Consider environmental changes
- Stop rewarding bad behaviors
- Teach replacement behaviors
- Recognize the importance of predictability for individuals with autism
- If the individual is nonverbal, try teaching signals, or using signs, objects, pictures, etc. to help them communicate
- Cognitive interventions
 - Teach how others are impacted by the behavior
 - Teach how others view him/her when he/she engages in the behavior
- When choosing interventions, consider the child's strengths and difficulties

(Koegel & LaZebnik, 2004)

Sensory Issues

40% of children with autism have sensory sensitivity which can lead to anxiety and panic (Atwood, 2007)

Sound sensitivity:

- Sudden & expected noises
- High Pitched Noises
- Complex sounds, noisy gatherings

Problem solving:

- avoid loud noises and prepare children for when they will happen
- explain the cause and duration of sound
- minimize background noise
- ear plugs

Sensory Issues

Tactile sensitivity:

- Tags, clothes, hugs

Visual Sensitivity:

- Intense levels of illumination, fluorescent lights
- Problem solving: wear sun visors or sunglasses

Sensitivity to Smell:

- perfumes, bug spray

Pain and temperature:

- lack of reaction to pain

Tips on Interacting

- **Help them communicate with you anyway they can (sign language, flashcards, picture book, etc.)**
- Keep directions simple; make sure child is paying attention to you
- Speak slowly and clearly and wait (longer) for a response
- Have patience, and a plan to deal with maladaptive behaviors for each child
- Be consistent and firm in enforcing behavior plans
- Prepare children for coming activities and transitions
- Review rules/ social skills targets before initiating an activity
- Speak in a pleasant but firm voice
- **Reinforce appropriate behavior, smile, praise often**

What is a Functional Assessment?

A behavior intervention plan lays out the specific activities to:

- 1) Prevent the problem behavior from occurring
- 2) Use positive approaches when a child does misbehave

Goal of FA:

- 1) Rearrange the events that occur before a child misbehaves (antecedents)
- 2) Change the consequences that come after a behavior occurs
- 3) Teach the child a replacement or appropriate behavior.

Functional Assessment

Child	Antecedent	Behavior	Consequence
	What happened before the behavior occurred	What is the child doing?	What happened after the behavior occurred
e.g.	What was the child being asked to do? What was happening in the surrounding environment?	What actions is the child engaging in (ex. crying, hitting, escaping)?	How did you respond to the child?

Example

Andrew loves drawing and cries whenever he needs to stop. The tantrums become so severe that his counselor lets him continue to color, and does not ask him to participate in any other activities.

Child	Antecedent	Behavior	Consequence
Andrew	The counselor asked him to stop coloring	crying, screaming	The counselor lets him continue

By letting Andrew continue coloring, the counselor has told him that tantrumming will allow him to continue coloring. This does not teach effective communication, or allow him to take full opportunity of the camp's activities

Case Study: Sara

Sara is 12 years old and is in a special education program at school with no inclusion. She prefers to communicate nonverbally when possible (e.g. pictures and gestures). When required she can and will speak, but her vocabulary is limited. Whenever the class changes activities, Sara will tantrum for half an hour. The teacher usually lets Sara continue the activity she was working on.

FA: Sara

Child	Antecedent	Behavior	Consequence
Sara	What happened before the behavior occurred?	What is the child doing?	What happened after the behavior occurred?

Case Study: Sara

Strategies?

- Show Sara a picture schedule at the beginning of camp
- Give her “warnings” of when the transition will occur
- Have a “preferred activity” to transition into
- Reward Sara with praise when good behavior occurs

Case Study: Michael

Michael is 15 years old. He is very verbal, but has difficulties controlling his urges to talk when he has something to say and often talks over others and interrupts them. He also engages in inappropriate behaviors, including using inappropriate language and engaging in bodily functions, when around peers. Usually his peers laugh at him.

FA: Michael

Child	Antecedent	Behavior	Consequence
Michael	What happened before the behavior occurred?	What is the child doing?	What happened after the behavior occurred?

Case Study: Michael

Strategies?

- Stop him when he interrupts others and ask others how they feel about being interrupted
 - Point out why this behavior isn't appropriate (e.g. it makes others feel that you aren't listening to them)
- Create a rule about interrupting others, praise Michael and other children when they engage in appropriate turn taking during conversation
- Have other children ignore the inappropriate behaviors
- Implement a reward system for not engaging in inappropriate behaviors for a set amount of time

Scenario: Safety

“A group of children are all peering into the duck pond while the leader explains their habitat. The counselor looks down at the child she’s been assigned to and notices that he disappeared.”

- Children with ASD are easily distracted, if something grabs their attention, their instinct is to check it out
- Remind the child that it is important to stay with the group
- Make sure to keep a consistent check on their whereabouts

(Natural Learning Concepts, 2008)

Scenario: Participation

“All the children are happily working on an art project EXCEPT for the child with ASD. The counselor is trying everything she can to motivate the child and is practically gluing, pasting, and coloring with her hand over the child’s hand. The child is still protesting and the counselor feels uneasy. ‘Should I insist he does this or should I let him off the hook?’ she wonders to herself.”

- Children with ASD can have different interests than typical kids.
- Many children with ASD may not choose to participate in many common activities, but that does not mean that they cannot learn to enjoy them
- Strategies: explain what is expected of the child and when the activity will end, use a timer or show the child a clock, make a picture schedule

(Natural Learning Concepts, 2008)

Scenario: Privacy

“The children are all excited because it’s time to go swimming. The instructor is explaining the rules and telling the kids where the changing rooms are. Out of the corner of his eye, he is shocked to see that the child with ASD has already started undressing and is practically naked.”

- Children with ASD may not be aware of privacy rules
- It is confusing for children with ASD that at times they are expected to change with a group and other times in private
- Strategies: let the child know ahead of time where they will be expected to change, give clear instructions about when and where the child will change and who should be called if he/she needs help

(Natural Learning Concepts, 2008)

Scenario: Turn Taking

“The children are bowling and the child with ASD is thrilled. This is his favorite game! There’s just one problem. He is so excited that he can’t wait his turn. He keeps grabbing the ball and knocking down the pins. The other kids are getting really upset and the assistant isn’t sure how to handle it.”

- Taking turns can be a difficult concept for children with ASD.
- Strategies: “pass the token” method, telling the child who goes before him and remind him that after the other child has his turn, then he can go. Praise for good behavior!

(Natural Learning Concepts, 2008)

Scenario: Can you repeat that?

“Everyone listen up! You have two minutes to finish decorating your shells. Take them to the ledge to dry. Then put your left over beads in the red box and make sure you put all your crayons in the yellow box. When you’ve finished cleaning up, line up to go outside.’ A few minutes later, the kids are almost done except for the autism spectrum kid who’s still sitting at the table with his shell and belongings scattered about.”

- Children with ASD may find long verbal instructions hard to follow, and often will not ask for clarification
- The child is not trying to be disobedient, he/she is simply confused
- Strategies: use as few words as possible, give the instructions one-on-one, ask the child to repeat the instructions

(Natural Learning Concepts, 2008)

Scenario: Social Awareness

“It’s break time and the children are having fun. The children are playing and laughing together. They’ve made up a game and are all participating. The child with ASD seems eager to join in but stands on the sidelines. Then he turns around, sits down, and happily occupies himself, ignoring everyone around him. The counselor wants to do the right thing and is faced with the decision of trying to get him to join in or allow him to remain alone.”

- The social world is confusing to many children with ASD.
- Strategies: provide assistance and encouragement in social interactions, pair the child up with another child who is kind and patient

(Natural Learning Concepts, 2008)

Scenario: Poor Motor Skills

“‘Snack time is over,’ calls out the camp counselor, ‘it’s time to clean up.’ He scans the tables and notices that the autism spectrum child looks very frustrated. He hasn’t even started eating his snack. Walking over to him, he realizes the child is unable to open his water bottle or his sandwich container which is snapped firmly closed. ‘Do you need help?’ he asks. The child looks at the counselor with relief as he hands him his snack.”

- Children with ASD may have problems with fine motor skills and with gross motor skills that require coordination.
- Strategies: start the action and allow the child to finish it (e.g., loosen the top of the sandwich container and allow the child to take it off); with gross motor skills, allow for extra concessions

(Natural Learning Concepts, 2008)

Lab Information

- Psychosocial Interventions Lab at Virginia Tech
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- Current Study
 - Experimental treatment for children and teens (12-17 years old) with an ASD and problems with feeling anxious or worried
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Questions?

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