Interventions for Autism Spectrum Disorders

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Presentation Outline

- Introduction
- Psycho-educational Report Recommendations
  - Social Relations
  - Communication
  - Challenging Behaviors
  - Academics
  - Comments Regarding Alternative Treatments
- Conclusions
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Social Relations

- *If the student is challenged by social situations, then ...*
  - Provide interpretation of social situations.
Social Relations

- The following is an example of a social story:

When Other Students Get Upset

Sometimes other students get upset and cry. When this happens their teacher might try to help them. The teacher might try to help them by talking to them or holding them. This is okay. Sometimes when other students get upset and cry, it makes me upset and angry. I can use words to tell my teacher that I am upset. I can say, "That makes me mad!" or "I'm upset!" It is okay to use words about how I feel. When I get upset I will try to use words about how I feel.

Gray & White, (2002)
Social Relations

The following is an example of cartooning:

Myles & Simpson (2001)
Social Relations

- Explain problematic social situations and in doing so let the student know that there are specific choices to be made and that each choice has a specific consequence.

Myles & Simpson (2001)
To address difficulty making friends, the following are recommended:
- Establish structured activities with peers.
- Provide direct instruction on how to approach an individual or group.
- Provide direct instruction on the skills needed to interact with peers.
- Structure social opportunities around the student’s special interests.
Social Relations

- After a challenging social situation conduct a “social autopsy.”
  - Such a conversation involves an examination and inspection of the student’s social errors to discover their causes, better understand the consequences of such errors, and to decide what can be done to prevent it from happening again.

Myles & Simpson (2001)
Social Relations

- Identify specific social conventions that need to be taught.
- Then provide direct instruction.

Myles & Simpson (2001)
Social Relations

- Make use of the student’s special interests to develop “power cards” that facilitate understanding of social rules.
  - For example, make use of a student’s interest in automotive mechanics and provide him/her with the following card that can be placed on his/her desk and/or placed in his/her pocket.

  Automotive mechanics and students both…
  1) listen to people when they tell them that something is wrong.
  2) ask good questions to make sure they understand the problem.
  3) try to solve problems.

Myles & Simpson (2001)
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Communication

- *If the student has difficulties with expressive language, then ...*
  - Consider making use of a Picture Exchange Communication System (PECS).

Frost & Bondy (1994)
Communication

- *If the student has difficulties with receptive language, then ...*
  - Consider using a Picture Exchange Communication System paired with a verbal command.
Communication

- **If the student has difficulties with receptive and expressive vocabulary, then ...**
  - Consider using total communication to teach and speak to the student.
    - When speaking to the student, pair your speech with the appropriate corresponding sign.
    - For example...

  ![Sign Language]

  Say “cookie” +

Goldstein (2002)
Consider using the Prelinguistic Milieu Training (PMT) with the student.

- Specific PMT strategies include the following:
  - Following the student’s attentional leads
  - Using prompts
  - Using imitation
  - Modeling gestures and vocalizations with consonants.
  - Developing play routines
  - Changing the environment

Goldstein (2002); McCathren (2000)
Communication

- **If the student has difficulties initiating conversation with others, then ...**
  - Consider pairing the student with a peer “tutor.”
  - The following strategies are recommended:
    - Structured play with desirable toys.
    - Peer participation during structured play time.
    - During play the peer should
      - Be physically proximal
      - Following the lead during play
      - Talk slowly and simply
      - May play time fun
    - During other activities, the peer should join with the student.

Whitaker (2004)
Communication

- *If the student has difficulties initiating or sustaining conversation with others, then ...*
  - Consider using a cue card/written script program to develop conversational skills.

```
Teacher: Do you like to play games?
Child: Yes. Do you like games?
Teacher: Yes. What’s your favorite game?
Child: Mr. Mouth. What game do you like?
Teacher: Candy Land. Are you good at playing games?
Child: Yes. Can we play together?
Teacher: Sure!
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Challenging Behaviors

- *If disruptive behavior problems are present, then ...*
  - Functional behavioral assessment is recommended.
Challenging Behaviors

- If a student needs predictability (e.g., becomes anxious when new materials/activities are introduced), then…
  - Consider the use of
    - Priming
    - Visual Schedule
    - Social Stories

Myles & Adreon (2001)
Challenging Behaviors

- If disruptive behavior problems are present and known to be related to perseverative activities, then ...
  - Decrease environmental and/or physiological conditions.

Reese et al. (2003)
Challenging Behaviors

- **If disruptive behaviors appear to be related to anxiety and/or a desire to avoid aversive sensory stimulation, then …**
  - Establish predictable routines
  - Use visual schedules to facilitate coping with change
  - Practice alternative coping behaviors such as relaxation

Reese et al., 2003
Challenging Behaviors

- *If disruptive behaviors appear to be related to obtaining desirable sensory stimulation, then ...*
  - Provide appropriate access to the desired sensory stimulation.
  - Provide instruction on how to appropriately obtain desired stimuli.
  - Providing contingent access to the desired sensory stimulation.

Reese et al. (2003)
Challenging Behaviors

- Additional suggestions related to sensory issues ...
  - Eye contact
  - Body language
  - Hallway transitioning
  - Humming
  - Organizational skills
  - Difficulty with change
  - Touching
  - Handwriting

Reese et al. (2003)
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Academics

- *If the student has weaknesses in social, language, attention, organizational, transitioning, and auditory processing then ...*
  - The instructional program should centers on the student’s strengths (TYPICALLY ROTE MEMORY AND VISUAL PROCESSING), special interests, and needs.
  - This may include the following:
    - Work systems
    - Calendars and visual schedules
    - Visual cues, classroom rules
    - Placed on students desk.
    - Demonstrations
    - Concrete directions
Academics

- Use strategies to make directions and learning expectations clearly understood.
  - Include essential concrete information in directions that will answer:
    1. How much work is there to do in this task?
    2. What exactly am I supposed to do?
    3. When do I do the work?
    4. What is my payoff for doing the work.

Volmer (1995)
If a student has reading fluency and/or comprehension difficulties, then …

- Highlighted text
- Study guides
- Graphic organizers

Academics

Graphic Organizers

Network Tree

Spider

Cycle

Chain of Events

Initiating Event

Event 1

Event 2

Final Outcome

Event 3

Problem/ Solution

Who

Problem

What

Why

Solution

Attempted Solutions

1.

2.

Results

1.

2.

End Results

Venn Diagram

A

C

B
Academics

- If a student has written expression (e.g., handwriting) difficulties then ...
  - Verbal responses
  - Computer
  - Multiple choice
  - Projects
If a student has difficulty with note taking, then …

- Provide the student with a
  - complete outline including the main idea and supporting details.
  - skeletal outline that he/she can use to fill in details.
  - peer copy of the notes.
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Alternative Treatments

- The following recommendations may be a part of a comprehensive treatment plan.
- However, the school psychologist should treat these recommendations with caution.
- These would NOT typically appear in the psycho-educational report!
Alternative Treatments

● What are alternative treatments?
  – “…strategies that have not met the standards of clinical effectiveness, either through randomized controlled clinical trials or through the consensus of the biomedical community.”

American Academy of Pediatrics (2001)
Alternative Treatments

- If the student exhibits behavioral problems, then the following vitamin supplements might be recommended:
  - Combination of vitamin B6 and magnesium
  - Vitamin C
  - Vitamin A

Levy & Hyman (2002)
Alternative Treatments

- If the student exhibits behavioral problems, then the following medications might be recommended:
  - Secretin
  - Risperdal

Levy & Hyman (2002)
http://www.fda.gov/bbs/topics/NEWS/2006/NEW01485.html
Alternative Treatments

- For regulation of immune function, the following treatments might be recommended:
  - Antibiotic
  - Antifungal
  - Antiviral Medications
  - Probiotics
  - Intravenous human immune globulin
  - Vitamin A supplementation
  - Withholding of vaccines

Levy & Hyman (2002); Brock, Jimerson, & Hansen (2006)
Alternative Treatments

- For control or improvement with symptoms of autism, the following might be recommended:
  - Gluten-free/casein-diet
  - Chelatin/Mercury-deoxification

Levy & Hyman (2002)
Alternative Treatments

- If the student is sensitive to sound, then the following treatment might be recommended:
  - Auditory integration to decrease the sensitivity to sound through systematic exposure to altered music by headphones.

Levy & Hyman (2002)
Alternative Treatments

- If the student experiences communication challenges, then the following might be recommended:
  - Facilitated communication.
Alternative Treatments

- If the student exhibits behavior problems, then the following might be recommended:
  - Use of craniosacral manipulation.

Levy & Hyman (2002)
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