

IHS ASD Series: Supporting Individuals with ASD and Evidence-Based Practices

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Disclosure

- The presenters have no financial relationship to this program.

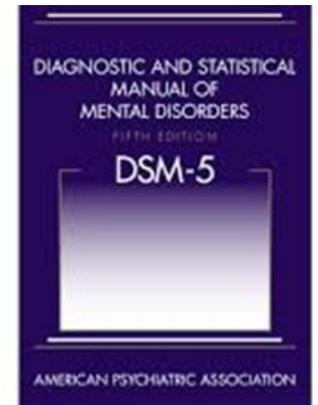
Objectives

At the end of this presentation, participants will be able to:

- Provide a definition of evidence-based practices
- Name two resources for identifying evidence based practice for individuals with ASD
- Name three Established Treatments for individuals with ASD
- Identify at least three specific evidence-based support strategies for individuals with ASD

Review of ASD Core Deficits

- Deficits in social communication and social interaction
 - Social approach/interaction
 - Nonverbal communication
 - Relationships
- Presence of restricted, repetitive patterns of behavior, interests, or activities
 - Stereotyped or repetitive motor movements, objects, speech
 - Routines
 - Restricted interests
 - Sensory



Evidence-Based Practices

- Interventions that have been shown through research to be effective for a particular population
 - Peer reviewed journal articles
- NOT based solely on experience
- NOT based on their popularity
- Increase potential benefit or costs and limit risk of harm
- Evolutionary

Evidence-Based Practices in ASD

- It seems as though everyday there are new interventions for ASD
- The field has established a number of interventions that have the evidence-base to be effective for ASD
- There are also many non-evidence-based interventions
- Practitioners should know how to identify evidence-based practices to implement effectively
- Staying up to date
- Critically evaluate interventions

Question #1

- Evidence based practices are:
 - A) Interventions that seem to have worked for an individual
 - B) The only interventions that can possibly work for an individual
 - C) Interventions that have been shown through rigorous research to be effective

How do I know what treatment for ASD is evidence-based?

- Association for Science in Autism Research (ASAT)
- Organization for Autism Research (OAR)
- National Autism Center (NAC)
 - National Standards Project
- National Professional Development Center (NPDC)

Organization for Autism Research



- Focus on applied science for ASD
- Research and resources information
 - provides an overview of the research community
- Tips on how to evaluate research
- Developed guides for parents and educators

National Autism Center



- Nonprofit organization dedicated to disseminating evidence-based information about ASD including resources for families
- Part of May Institute's Center for the Promotion of Evidence-based Practice
- Started the **National Standards Project** in 2009 to establish a set of standards for effective, research-validated interventions for children with ASD

National Standards Project

- Phase 1- 2009 - found 22 interventions that have been shown to be **effective** for treating children with ASD
- Phase 2- 2015 - updated literature search for interventions for children and found 14 **effective**
 - Included adult interventions
- **Established**- sufficient evidence is available that the intervention produces favorable outcomes (several published peer articles are available)
- **Emerging**- there are a few studies that suggest favorable outcomes, but more research is needed to draw a conclusion
- **Unestablished**- little or no evidence to draw a conclusion

National Standards Project Phase 2 (NSP2)

Established Treatments *(for
children to adults under 22 years)*

1. Behavioral Interventions
2. Cognitive Behavioral Intervention Package
3. Comprehensive Behavioral Treatment for Young Children
4. Language Training (Production)
5. Modeling
6. Naturalistic Teaching Strategies
7. Parent Training
8. Peer Training Package
9. Pivotal Response Training
10. Schedules
11. Scripting
12. Self-Management
13. Social Skills Package
14. Story-based Intervention

National Standards Project Phase 2

(for children up to age 22)

- **Emerging (18)**

1. Augmentative and Alternative Communication Devices
2. Developmental Relationship-based Treatment
3. Exercise
4. Exposure Package
5. Functional Communication Training
6. Imitation-based Intervention
7. Initiation Training
8. Language Training (Production & Understanding)
9. Massage Therapy
10. Multi-component Package
11. Music Therapy
12. Picture Exchange Communication System
13. Reductive Package
14. Sign Instruction
15. Social Communication Intervention
16. Structured Teaching
17. Technology-based Intervention
18. Theory of Mind Training

- **Unestablished (13)**

1. Animal-assisted Therapy
2. Auditory Integration Training
3. Concept Mapping
4. DIR/Floor Time
5. Facilitation Communication
6. Gluten-free/Casein-free diet
7. Movement-based Intervention
8. SENSE Theatre Intervention
9. Sensory Intervention Package
10. Shock Therapy
11. Social Behavioral Learning Strategy
12. Social Cognition Intervention
13. Social Thinking Intervention

Question #2

- Which of the following is an Established Treatment according to the National Standards Project?
 - A) Social Cognition Intervention (Social Thinking)
 - B) Behavioral Interventions
 - C) Sensory Integration
 - D) Animal Assisted Therapy

Naturalistic Teaching Strategies

- Focus on teaching skills using materials in the environment
 - Toys, food
- Use naturally occurring activities as opportunities to increase skills
 - Daily routines



- Primarily child-directed

Parent Training

- Parents are trained as therapists to implement various strategies
- Can be trained to help their child:
 - Developing imitation skills
 - Sleep routines
 - Joint attention
 - Developing play date activities
 - Adaptive skills



Social Skills Package

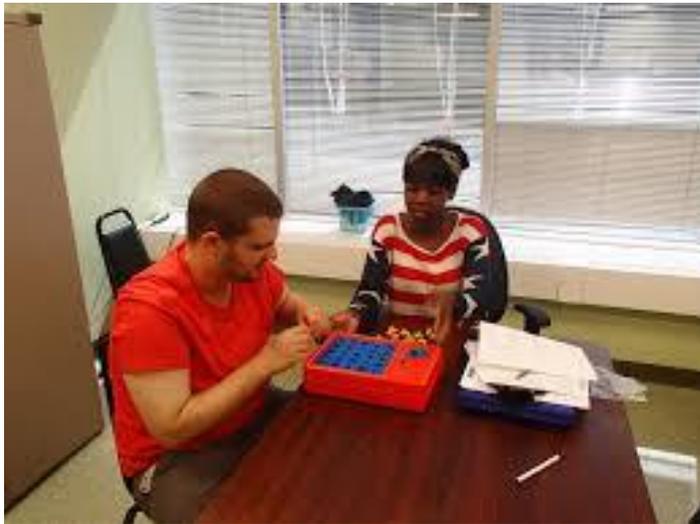
- Provide the skills necessary to meaningfully participate in the social environments of homes, schools, and communities



- Wide range of abilities such as eye contact, making friends, having conversations
- Lots of modalities such as individual and group
- Several manualized treatments (e.g., PEERS)

National Standards Project Phase 2

For adults 22 years and older



- Established (1)
 - Behavioral Interventions
- Emerging (1)
 - Vocational Training Package
- Unestablished (4)
 - Cognitive Behavioral Intervention Package
 - Modeling
 - Music Therapy
 - Sensory Integration Package

National Professional Development Center



The National Professional Development Center on Autism Spectrum Disorder

- Review of EBPs in 2014
- Practice briefs
- Implementation guidelines
- Internet modules



National Professional Development Center on Autism Spectrum Disorder (2014)

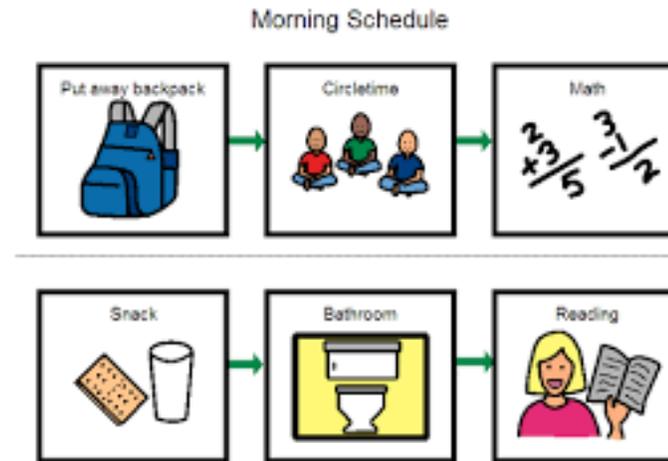
- Antecedent-Based Interventions
- Cognitive Behavioral Intervention
- Differential Reinforcement
- Discrete Trial Training
- Exercise
- Extinction
- Functional Behavior Assessment
- Functional Communication Training
- Modeling
- Naturalistic Intervention
- Parent-Implemented Intervention
- Peer-Mediated Instruction and Intervention
- Picture Exchange Communication System (PECS)
- Pivotal Response Training
- Prompting
- Reinforcement
- Response Interruption/Redirection
- Scripting
- Self-Management
- Social Narratives
- Social Skills Training
- Structured Play Group
- Task Analysis
- Technology-aided Instruction and Intervention
- Time Delay
- Video Modeling
- Visual Support



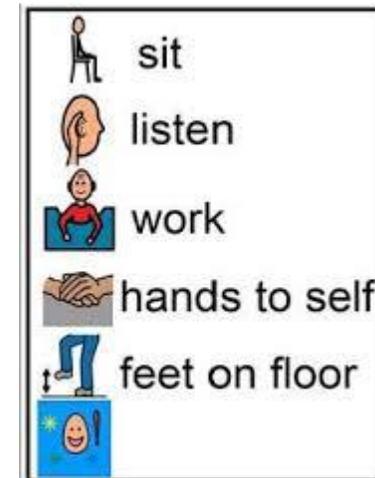
THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON
AUTISM SPECTRUM DISORDERS

Visual Supports

- Any visual display that supports the learner engaging in a desired behavior or skills independent of prompts
- Examples
 - Pictures, written words, objects within the environment, arrangement of the environment or visual boundaries, schedules, maps, labels, organization systems, and timelines



First ____ Then ____

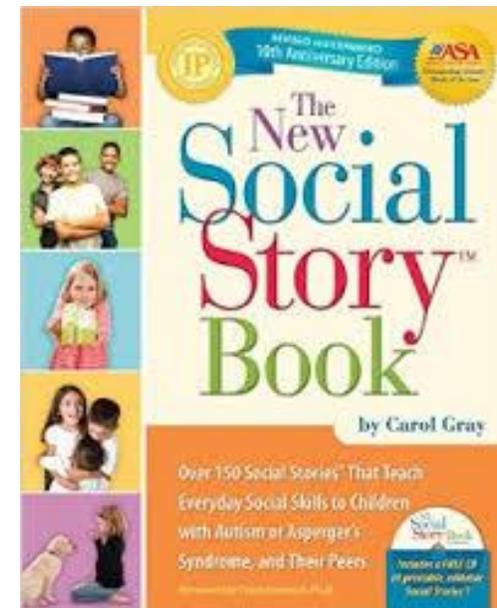


Discrete Trial Training

- Instructional process usually involving one teacher/service provider and one student/client and designed to teach appropriate behavior or skills
- Instruction usually involves massed trials
- Each trial consists of the teacher's instruction/presentation, the child's response, a carefully planned consequence, and a pause prior to presenting the next instruction

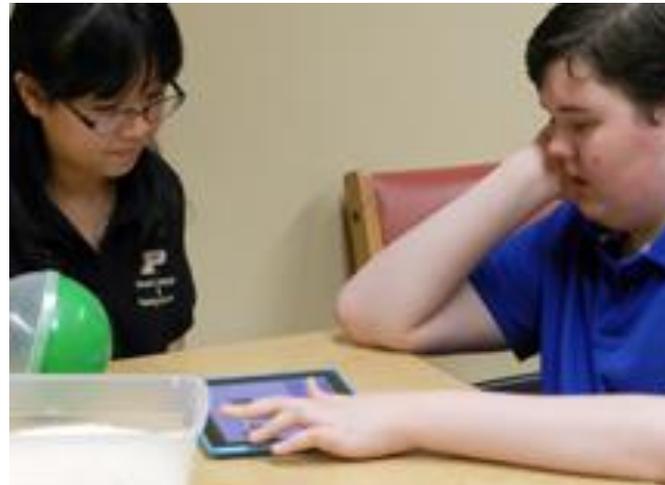
Social Narratives

- Narratives that describe social situations in some detail by highlighting relevant cues and offering examples of appropriate responding
- Social narratives are individualized according to learner needs and typically are quite short, perhaps including pictures or other visual aids



Social Communication Supports

- Keep language simple (one up rule)
- Structure activities for give and take
- Wait and signal
- Do what they do and a little bit more (imitate and expand)



Restricted Interests - Supports

- Incorporate interests into routines and activities
- Shape behaviors to more closely resemble what typical children do
- Consider the form and intensity of repetitive movements.
 - Do they interfere with other activities (i.e. – will the child stop when asked or when there is something else to do)?
 - Do they interfere with learning?
 - Do they interfere with social relationships?
 - Evaluate whether stopping/changing them is a priority

Question #3

- An evidence-based strategy to address Restrictive Interests for individuals with ASD is:
 - a) Modify behaviors to be more socially acceptable
 - b) Prevent the individual from engaging with those interests or talking about them
 - c) Incorporate those interests into routines and activities
 - d) Both A and C

Sensory Supports

- Quiet environments (visual, auditory) are usually best
- Make the environment predictable
- Provide options for the child to minimize sensory input that is disturbing
- Notice what helps the child to be calm and alert



Cognitive Supports

- Tailor supports to cognitive abilities
- Teach in the natural environment-
makes it more meaningful
- LOTS of practice
- Capitalize on strengths and interests



Problem Behavior Supports

- Understand why the behavior is happening
- Try to prevent behaviors from happening
 - Anticipate problems and consider what might help
 - Stick with a routine, use visual supports and allow for calming items/activities
 - Be alert and sensitive regarding physical well-being
- When behaviors do happen, remain calm and quiet and keep everyone safe
- Physical management is a last resort

Question #4

- Evidence-based strategies to prevent problem behavior for individuals with ASD before they occur include:
 - a) Punishing the child for engaging in the behavior
 - b) Using time-out
 - c) Determine the function of the behavior for the child and teach the child an alternative behavior that satisfies the same function
 - d) Ignore the behavior when it occurs

In Sum

- Both NSP and NPDC used rigorous criteria in their reviews
- NSP used “packages” that included many different interventions while NPDC listed several individual interventions
- There was considerable overlap between the two
- Research in ASD is in constant motion and it is important to keep up to date to assure that families are getting the most reliable recommendations for the best outcomes

Resources

- Association for Science in Autism Research (ASAT): <http://www.asatonline.org/>
- Organization for Autism Research (OAR): <http://www.researchautism.org/>
- National Autism Center (NAC): <http://www.nationalautismcenter.org/>
- National Professional Development Center (NPDC): <http://autismpdc.fpg.unc.edu/>
- National Standards Project (NSP): <http://www.nationalautismcenter.org/national-standards-project/>

Contact Information

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