

Evidence-Based Practice with Autism Spectrum Disorder: A Literature Review

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Introduction

Autism Spectrum Disorder (ASD) Categories

- Autism
- Rett Syndrome
- Asperger's Syndrome
- Childhood Disintegrative Disorder
- Pervasive Developmental Disorder/Not Otherwise Specified (PDD/NOS)

Core Deficits

- Cognition
- Communication
- Social Interaction

Problem

- Prevalence = 1 in 166 and increasing
- Communication deficits: language, social skills, verbal interactions
- Require speech-language pathologist (SLP) services
- Evidence basis for SLP practice is unknown

Purpose

- To review commonly used intervention techniques
- To determine evidence basis for SLP practice

Techniques Reviewed

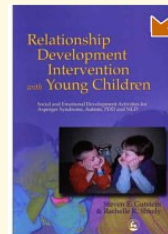
Applied Behavior Analysis (ABA)

- Founded on behavioral theory – stimulus-response-reinforcement
- Implemented in individual's environment
- Typically targets social behaviors
- Treatment efficacy empirically supported
- Limited evidence for SLP practice



Developmental, Individual-Differences, Relationship-Based (DIR)/ Floortime

- Addresses emotional goals missed in early development
- Emotional reaction leads to child understanding causality
- One-on-one, play-based activities
- 20 to 30 minute sessions, 8 to 10 times/day
- Some evidence for improved cognition and emotional status
- No evidence for SLP practice



Learning Experiences...an Alternative Program (LEAP)

- Addresses social, emotional, language, communication, independent work, behavior, cognition, and physical skills
- Integrated school: 2 classrooms, 10 typically developing children, 6 children with ASD
- 3 hours/day, 5 days/week
- Classroom contains a fulltime SLP
- Evidence for improved social skills and academic engagement
- Limited evidence for SLP practice



Picture Exchange Communication System (PECS)

- System to create/enhance communication between partners
- Encourages speech indirectly
- Uses prompts and reinforcers → independent communication
- Small N: some increase in imitative and spontaneous speech
- Limited evidence for SLP practice

Relationship Development Intervention (RDI)

- Targets experience-sharing, joint attention, inter-subjective engagement, friendship, emotion sharing, referencing, theory of mind
- Parent-based, done at home in daily activities
- New approach: very limited research to date
- Preliminary findings: improved social interaction and communication
- Little direct evidence for SLP practice

Treatment and Education of Autistic and Communication Handicapped Children (TEACCH)

- Collaboration between parents and paraprofessionals
- Includes education/training of children and parents
- Elicit communication, increase generalization
- Highly structured learning environment capitalizes on child's personal characteristics
- Limited efficacy linked specifically to technique
- No data for SLP practice

Conclusions

Interpretations

- Variable evidence supporting efficacy of techniques for some core deficits
- All techniques indirectly address communication
- Limited research addressing speech and language
- SLPs left with little evidence to support practice

Future Directions

- Individual SLPs: take initiative, conduct single-subject studies clinically
- Clinical Researchers: clearly define technique, conduct well-controlled group studies

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