

Peer Mediated Interventions & Autism Spectrum Disorders

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Introduction

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- ✧ Intervention Specialists
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- ✧ Research Interests & Presentations
 - ✧ Applied Behavior Analysis & Positive Behavior Support Tiered Interventions
 - ✧ Special Education Leadership
 - ✧ Educationally Based ABA & Crisis Prevention

Session Objectives

- **Participants will be able to** train, facilitate and reinforce peer mediated intervention strategies with children with autism and related disabilities
- **Participants will be able to** assess social engagement and initiation as measured through peer mediated intervention assessment tool
- **Participants will be able to** develop peer mediated intervention programming to benefit children with autism and related disabilities in public and private sectors

Outline

- Literature Review
- Case Study
- Implementing Peer Mediated Intervention Programs
- Success Stories from Practitioners & Families
- Open Forum
- Closing

Literature Review

ABSTRACT

Children with autism spectrum disorders and related disabilities often struggle with social interaction with their typical peers. Peer-mediated intervention is a research-based methodology where typical peers are trained to implement interventions that increase and improve interactions for children with autism and related disorders. Peer-mediated intervention can be used across school settings and peers. It is an inclusive strategy that allows individuals with disabilities to learn from their typical peers.

Literature Review cont'd

SIGNIFICANCE

Difficulty with social interactions is one of the defining characteristics of autism and autism spectrum disorders (Rogers, 2000).

A variety of research based approaches can be used to improve social functioning between children with autism and their typical peers;

- ❖ video modeling (Bellini & Akullian, 2007)
- ❖ embedded instruction (Macy & Bricker, 2007)
- ❖ social scripts (Agosta, Graetz, Mastropieri & Scruggs, 2004)
- ❖ direct instruction (Ganes & Florez, 2009)
- ❖ peer-mediated intervention (Rogers, 2000 & Bellini & Akullian, 2007).

Peer-mediated intervention is a research based approach where typical peers are trained to model, facilitate and reinforce appropriate social interactions with children with autism and related disabilities in inclusive settings (DiSalvo & Oswald, 2002). Placing students in a structured social setting with typical peers allows for an increased number of naturalistic opportunities for interaction, specifically initiation. Arming them with high-probability requests and peer modeling helps expedite the process (Jung, Sainato & Davis, 2008).

Citation	Design	Intervention	Results
Goldstein, H., Kaczmarek, L., Pennington R. & Shafer, K. (1992).	Multiple Baseline (ABCB reversal design)	Independent Variable: PMI Dependent Variable: increase social interactions & comment, acknowledge and attend to students	Four of the five students improved their rate of social interaction following intervention
Harper, C. B., Symon, J. B., & Frea, W. D. (2008).	Multiple Baseline	Independent Variable: PMI & PRT Dependent Variable: Increase social interaction on playground	Both students improved social interactions at recess
Jung, S., Sainato, D. M. & Davis, C. (2008).	Multiple Baseline	Independent Variable: PMI Dependent Variable: Increase responses to low-probability requests	All three students increased responses to low-probability requests
Kamps, D. M., Barbetta, P. M., Leonard, B. R., & Delquardri (1994).	Multiple Baseline (across subjects w/ reversal)	Independent Variable: PMI Dependent Variable: Improving reading skills & social interactions	Students increased reading fluency, comprehension & total duration of social interactions during free-time
Kamps, D. M., Royer, J., Dungan, E., Kravtis, T., Gonzalez-Lopez, A., Garcia, J. . . . Garrison-Kane, L. (2002).	Study 1- Single Subject Reversal Study 2- Single Subject	Study 1- Independent Variable: PMI Dependent Variable: Social skills with peers Study 2- Independent Variable: PMI Dependent Variable: Generalization	Study 1- Intervention increased time students with autism were engaged with their typical peers Study 2- Greater generalization the longer the students received peer-mediated intervention

Citation	Design	Intervention	Results
Lee, S., Odom, S. L., & Loftin, R. (2007).	Multiple Baseline	Independent Variable: PMI Dependent Variable: Decrease in specific stereotypical behavior & increase interactions	Undesired stereotypical behaviors decreased & desired social interactions increased
Odom, S. L. & Watts, E. (1991).	Multiple Baseline	Independent Variable: PMI w/ CTVF Dependent Variable: Playing in play area with peers with less adult prompts	Teacher prompts did not increase or decrease through peer mediated intervention
Roeyers, H. (1996).	Multiple Baseline	Independent Variable: PMI Dependent Variable: Increase social interactions with peers & generalize	Students with PDD-NOS increased social interactions & generalized across peers and settings
Trembath, D., Balandin, S., Togher, L., & Stancliffe, R. J. (2009).	Multiple Baseline	Independent Variable: PMI Dependent Variable: Increase communication (typical & augmentative with peers)	All students generalized their social interaction with peers across settings (play and meal time)

Literature Review cont'd

METHOD & DESIGN

The focus of the research is the effect of peer-mediated intervention on increasing social initiations and improving social interactions between children with autism and typically developing peers.

Research had specific focuses;

- ❖ Increasing social interactions (Goldstein, Kaczmarek, Pennington & Shafer, 1992; Harper, Symon & Frea, 2008; Jung, Sainato & Davis, 2008; Odom & Watts, 1991; Roeyers, 1996 & Trembath, Balandin, Togher & Stancliffe, 2009),
- ❖ Improving reading fluency, comprehension & social interactions (Kamps, Barbeta, Leonard & Delquardri, 1994),
- ❖ Increasing duration of interaction between peers (Kamps, Roeyer, Dungan, Kravits, Gonzalez- Lopez, Garcia. . . Garrison-Kane, 2002) &
- ❖ Decreasing stereotypical behavior to increase peer interactions (Lee, Odom & Loftin, 2007).

All nine studies incorporated training before initiation of intervention. Trainings included;

- ❖ Embedded instruction Kamps et al., 2002)
- ❖ Multiple trainings with reinforcement (Goldstein et al., 1992; Harper et al., 2008; Kamps et al., 1994; Lee et al., 2007 & Odom & Watts, 1991),
- ❖ Illustrated stories teaching typical peers their roles and initiation (Trembath et al., 2009),
- ❖ Peer & adult role-play reinforcing desired interactions (Goldstein et al., 1992; Lee et al., 2007; Odom & Watts, 1991 & Trembath et al., 2009).

Case Study

Case Study

Single Subject Multiple Baseline Design

Determine if students will increase social initiations given social script training and opportunity to generalize with “buddies”

Four students (9-11 years) with autism

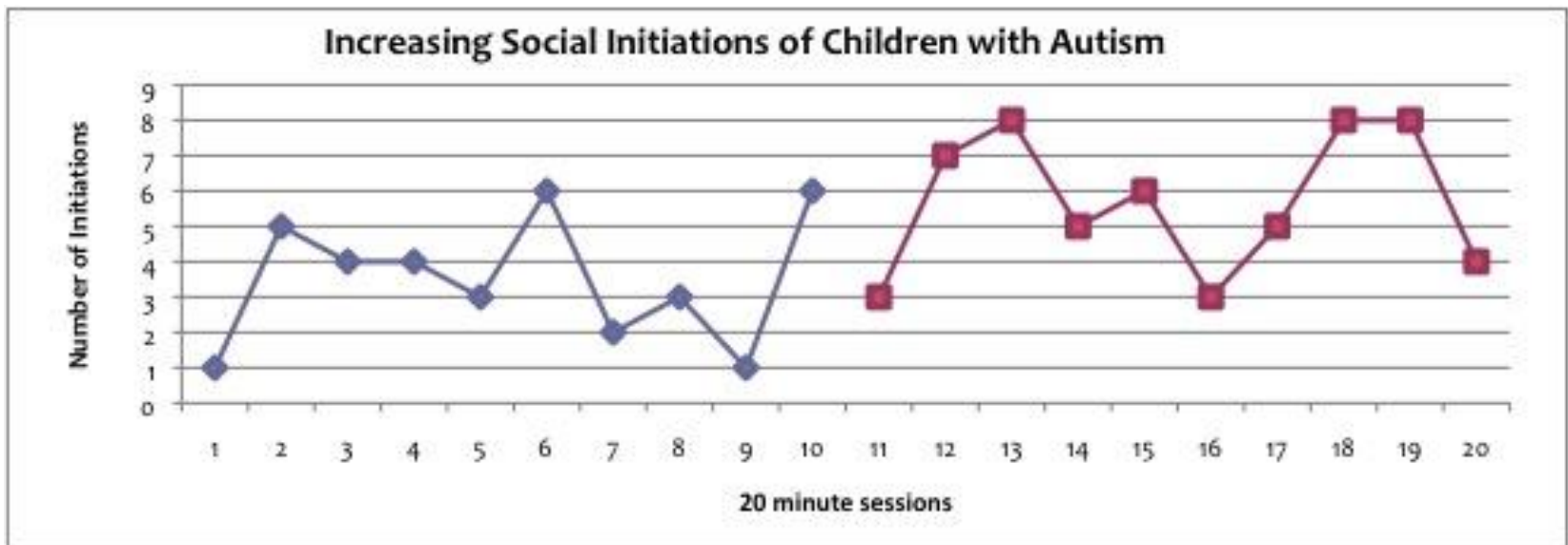
Independent Variable

of initiations

Dependent Variable

20 minute daily sessions

Case Study cont'd



Implementing PMI Programs

■ Environment

- The inclusive environment allows for children with disabilities to learn appropriate social skills from their typical peers (Laushey & Heflin, 2000).
- Inclusive environments are any school or community environment where students with disabilities can be effectively “included” with their typical peers.
- Environments for PMI should be well thought out, sensitive to students needs and designed to aid in comfort of all students in interacting with one another.

Implementing PMI Programs

■ Peer Training

- A variety of approaches can be used to improve social functioning between children with autism and their typical peers including...
 - **video modeling** (Bellini & Akullian, 2007)
 - **embedded instruction** (Macy & Bricker, 2007)
 - **social scripts** (Agosta, Graetz, Mastropieri & Scruggs, 2004)
 - **direct instruction** (Ganes & Florez, 2009)
 - **peer-mediated interventions** (Rogers, 2000 & Bellini & Akullian, 2007)

Implementing PMI Programs

- Matching Skill Sets
 - Five studies, in the literature review, noted peers were selected and nominated by teachers and administrators based on characteristics such as regular attendance, age appropriate interactions, and willingness to participate and interact with others (Harper et al., 2008; Jung et al., 2008; Lee et al., 2007; Roeyers et al., 1996 & Trembath et al., 2009).
 - Interest inventories should be used to match interests

Implementing PMI Programs

- **Involved Players**
 - IEP team
 - Intervention Specialist
 - Parent
 - General Education Teacher
 - Therapists
 - Administrators
 - Students

Implementing PMI Programs

- **Scheduling**
 - No new instruction
 - Character education
 - Transition

Implementing PMI Programs

- **Evaluation & Data Collection**
 - Video
 - Interval recording
 - Interviews
 - Cognitive Behavior Therapy

Success Stories

Success stories shared by parents, educators,
administrators & peers of children with disabilities

Open Forum

- What does this look like for you and your students?
- Questions...

Closing & Thank You

Contact Us:

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Thank You...

Students, parents, teachers and administrators from
Hudson City School District

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