Peer Mediated Interventions & Autism Spectrum Disorders
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Introduction

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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.
文学综述
案例研究
实施同伴介导干预程序
成功案例来自实践者与家庭
开放论坛
闭幕
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.
**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 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).
<table>
<thead>
<tr>
<th>Citation</th>
<th>Design</th>
<th>Intervention</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td>Goldstein, H., Kaczmarek, L., Pennington R. &amp; Shafer, K. (1992).</td>
<td>Multiple Baseline (ABCB reversal design)</td>
<td>Independent Variable: PMI Dependent Variable: increase social interactions &amp; comment, acknowledge and attend to students</td>
<td>Four of the five students improved their rate of social interaction following intervention</td>
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<tr>
<td>Kamps, D. M., Barbetta, P. M., Leonard, B. R., &amp; Delquadri (1994).</td>
<td>Multiple Baseline (across subjects w/ reversal)</td>
<td>Independent Variable: PMI Dependent Variable: Improving reading skills &amp; social interactions</td>
<td>Students increased reading fluency, comprehension &amp; total duration of social interactions during free-time</td>
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<td>Kamps, D. M., Royer, J., Dungan, E., Kravtis, T., Gonzalez-Lopez, A., Garcia, J. . . . Garrison-Kane, L. (2002).</td>
<td>Study 1- Single Subject Reversal Study 2- Single Subject</td>
<td>Study 1- Independent Variable: PMI Dependent Variable: Social skills with peers Study 2- Independent Variable: Generalization</td>
<td>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</td>
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| 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 |
**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) |
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

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

![Graph showing increasing social initiations of children with autism.](image)


**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.
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)
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 shared by parents, educators, administrators & peers of children with disabilities
• What does this look like for you and your students?
• Questions…
Closing & Thank You

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Thank You…

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


