

**Fabrizio/Moors**  
CONSULTING

Teaching Peers to Conduct Functional Assessments of Problem Behavior in a Classroom Setting

Holly Almon Morris  
Michael Fabrizio  
Kristin Schirmer  
Aminata Diakite  
Adam Litchfield

Fabrizio/Moors Consulting  
Seattle, WA

**Fabrizio/Moors**  
CONSULTING

Experimental Question

*What are the effects Direct Instruction lessons on the quality of feedback delivery given by peers in the presence of misbehavior episodes displayed by a student with autism?*

**Fabrizio/Moors**  
CONSULTING

Benefits of Peer Training

- Oke & Schreibman (1990)
  - Role-play and videotaped feedback (discrimination training) on peer social initiations...then used same package with child with autism
- Pierce & Schreibman (1997)
  - Peer-implemented Pivotal Response Training to increase social behavior of children with autism
- Barry, Klingler, Lee, Palardy, Gilmore, & Bodin (2003)
  - Discussion and role-play with peers on greeting and play skills of children with autism (less impact on conversation skills)

**Fabrizio/Moors**  
CONSULTING


Peers and the FBA Process

- No existing data that teach peers to view problem behavior from a functional perspective
- Some data that include peers as respondents to functional assessment interviews
  - Older students (middle school and above)
  - Not students with autism

**Fabrizio/Moors**  
CONSULTING

Benefits of Direct Instruction

- *Project Follow-Through...model had highest number of educationally significant differences in basic skills, cognitive skills, and affective measures (Watkins, 1997)*
- Carefully-planned lessons
- Small learning increments
- Clearly defined and prescribed teaching tasks
- Scripted presentations



**Fabrizio/Moors**  
CONSULTING

Why do this experiment?

- Hope to develop more skilled peer community around children with autism
  - Functional contexts of misbehavior
  - Increased learning opportunities
  - Broaden the stimulus control of more prosocial behavior
- To help children more competently mediate the sometimes irritating behavior of their peers with autism, hopefully leading to better peer relationships

**Fabrizio/Moors** Consulting

Some questions for you

- How can we better measure the social validity of the procedures and outcomes?
- Do you have any suggestions for improving the measurement involved?
- Are there other designs that seem more appropriate?
- How do we measure the reliability of the *in situ* data?
- Any other suggestions or feedback?

**Fabrizio/Moors** Consulting

Participants

- "Indirect" Participant
  - Leila
  - 8 years old -- 2<sup>nd</sup> grader in Montessori program
  - Moderate to High-skilled learner with autism
  - Received 20-25 hours of behavior analytic intervention per week, at school and at home
  - Engaged in problem behavior in classroom environment
  - Presence of therapists S<sup>delta</sup> for problem behavior
  - Applied rules very well

**Fabrizio/Moors** Consulting


Participants

- "Direct" Participants
  - Louise, Teri, and Keith
  - 8 years old
  - 2nd graders in private Montessori program
  - Selected as participants because of concern for and empathy toward Leila (indirect participant)

**Fabrizio/Moors** Consulting

History


- So what do we mean by "problem behavior"?
  - Name calling
    - Dad taught Leila "the name game"
    - Dad didn't teach Leila the discriminations needed for the "name game"
    - Peers not thrilled that with Dad's instructional choice
  - Getting too close
  - asking questions too many times
  - Laughing inappropriately



**Fabrizio/Moors** Consulting

History


- What usually occasioned these problem behaviors?
  - Decrease in reinforcement from peers
    - Lack of attention
  - Skill deficits
    - Unclear what to say given unknown question/statement
    - Unclear what to do given unknown situation



**Fabrizio/Moors** Consulting

History

- What usually occurred following these problem behaviors?
  - Peers emitted a general mand once
    - "Leila stop it!"
    - "Don't do that!"
  - Peers left



**Fabrizio/Moors** CONSULTING

Our fears

- Impaired relationships between Leila and her peers
  - Folks don't tend to hang around with folks who irritate them

**Fabrizio/Moors** CONSULTING

Setting

- All direct instruction sessions took place in small room outside of the classroom

**Fabrizio/Moors** CONSULTING

Procedures

- Independent Variable
  - Direct Instruction lessons that taught peers to deliver feedback to Leila when she misbehaved
  - Three lessons/components:
    - Providing specific (clear) feedback to Leila
    - Conducting a mini- "functional assessment" regarding the potential cause of the misbehavior
    - Providing a replacement behavior
- Dependent Measures
  - Number of correct and incorrect peer responses on scenario tests
  - Number of times per week peers used the three types of skills above when Leila misbehaved during the natural course of the school day

**Fabrizio/Moors** CONSULTING

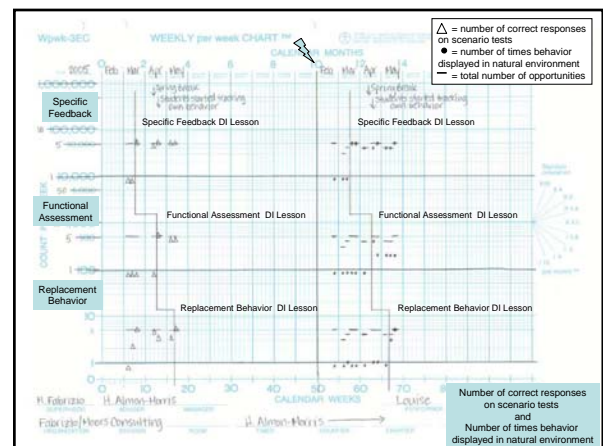
Design

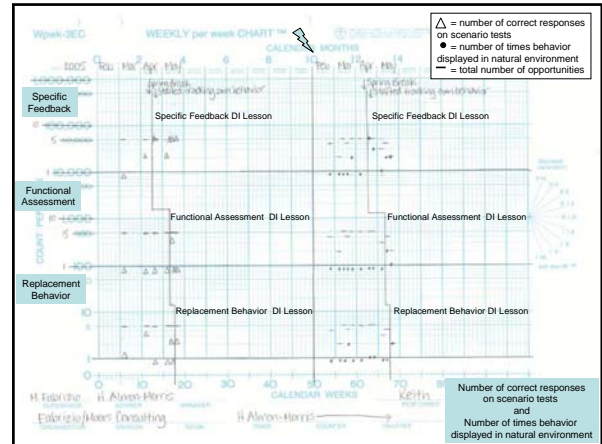
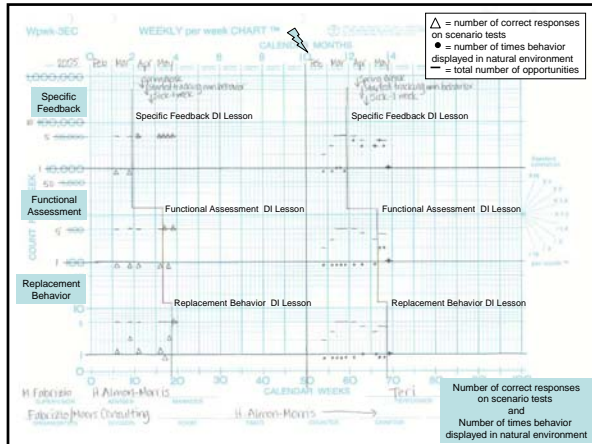
- Multiple baseline design across 3 peers and 3 behaviors
  - Delivering clear feedback
  - Conducting mini-"functional assessment" regarding potential cause of misbehavior
  - Providing replacement behavior

**Fabrizio/Moors** CONSULTING

Measures

- Peers' performance on scenario tests
  - 5 scenarios that described Leila's behavior as it often occurred in classroom
  - "What would you say?" → correct or incorrect response across 3 feedback components
- Display of peers' behavior in natural environment
  - Across all 3 feedback components
  - Classroom teacher recorded these instances daily → then peers began to track their own behavior daily





**Fabrizio/Moors**  
CONSULTING

**Welcome to research in the real world!!!**

**Fabrizio/Moors**  
CONSULTING

**Results/Discussion**

- 8 out of 9 Direct Instruction lessons effectively taught students how to deliver feedback in context of scenario tests
  - Effect not as clear in Replacement Behavior content area for 2 participants; they already occasionally displayed this behavior, although not consistently
  - Results maintained across
    - 6 out of 6 test content areas for Louise
    - 5 out of 6 test content area for Teri
    - 3 out of 6 test content areas for Keith
  - Functional Assessment content area of Test 6?
- Peers consistently displayed appropriate feedback in the classroom only after that component was taught in Direct Instruction lesson
  - Results most consistently maintained across Specific Feedback and Replacement Behavior content areas

**Fabrizio/Moors**  
CONSULTING

**Results/Discussion**

- Multiple baseline design = multiple opportunities for replication
- Logistical Difficulties
  - obtaining consistent schedule for peers to receive lessons
  - school staff reshuffling
  - obtaining consistent teacher/peer feedback (systems changes)
  - presence of tracking sheet

**Fabrizio/Moors**  
CONSULTING

**Future Research**

- Replication of effects across other peers of different children with autism
- Modify content of DI script for replacement behavior
- Evaluate the effects of a general training script
  - Not focused on the misbehavior of a given child with autism
  - Delivered by classroom teacher
- Assess the integration of a general FBA script into existing curricula that address diversity and advocacy training for elementary-aged children

## References

- Barry, T. D., Klinger, L. G., Lee, J. M., Palardy, N., Gilmore, T., & Bodin, S. D. (2003). Examining the effectiveness of an outpatient clinic-based social skills group for high-functioning children with autism. *Journal of Autism and Developmental Disorders*, 33, 681-701.
- Oke, N. J. & Schreibman, L. (1990). Training social initiations to a high-functioning autistic child: Assessment of collateral behavior change and generalization in a case study. *Journal of Autism and Developmental Disorders*, 20, 479-497.
- Pierce, K. & Schreibman, L. (1997). Multiple peer use of pivotal response training to increase social behaviors of classmates with autism: Results from trained and untrained peers. *Journal of Applied Behavior Analysis*, 30, 157-160.
- Watkins, C. L. (1997). *Project Follow Through: A Case Study of Contingencies Influencing Instructional Practices of the Educational Establishment*. Cambridge, MA: Cambridge Center for Behavioral Studies.