### Improving Academics in Children with Autism Using PRT

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#### Introduction

Increasing numbers of children with autism in general classroom settings (IDEA, 2004; Mesibov & Shea, 1996) Exposed to grade-level academic tasks

Problem behaviors during academics (Macintosh & Dissanayake, 2006;

Wide range of negative consequences



### Introduction

Resistant to traditional behavior management techniques (Grosenick, George,

Functions as a means to escape and avoid

How to increase motivation and responsivity? Provide more opportunities for success

Motivational Components

Modifying Curriculum (Kern, Childs, Dunlap, Clarke & Falk, 1994; Dunlap, Kern-Dunlap, Clarke, & Robbins, 1991)



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• Purpose

Investigate whether the use of motivational procedures of PRT <u>improve basic academic skills</u> in children with autism, specifically **writing and math**.



## Specific Questions

- Will the use of motivational procedures during writing and math tasks:
  - Result in faster completion?
  - Decrease disruptive behaviors?
  - Increase interest?
- Will gains maintain and generalize?



### Procedure

Differences Between Baseline and PRT Intervention					
	Baseline	PRT Intervention			
Materials & Setting	Chosen by Adult	Chosen by Child			
Task	Fixed Difficulty Level	Interspersal of easy and difficult tasks			
Reinforcer	Unrelated to the Task	Embedded within the Task			

Examples: Writing and Math



### Results

- Faster Completion
- Decreased Disruptive Behavior
- Increased Interest
- Maintained and Generalized



### Self-Initiated Writing

Playing Teacher Hangman Writing Stories Drawing Pictures

A map of Santa Barbara



### Discussion

- ▶ Collateral Gains
- Success in the School Setting
- ▶ Better Outcomes
- Prevention



## Summary – Home/School Coordination

- Reduces Disruptive Behavior
  - Avoidance
  - Escape
- Increases Child Responsiveness
- Increases Child Learning
- Improves Team Work



## Teaching Initiations to Children with Autism using PRT

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## Prognosis Study

- Literature Review
  - Children who had the best outcomes had:
    - Presence of Verbal Communication before the age of 5 years
    - High IQ (i.e., measurable IQ over 50)

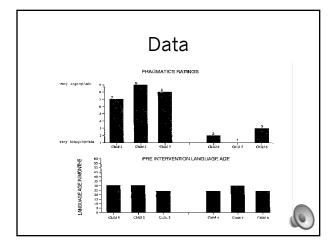


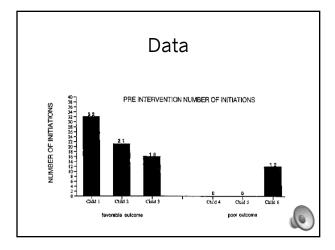
# Prognosis – Study 1

- Adolescents and Young Adults Selected that:
   Had good outcomes
   Had poor outcomes
- Data Selected to Analyze
   Communication
   Repetitive behaviors

  - Play
    Disruptive Behaviors
    Levels of Engagement







## Intervention Study Study 2 - Initiations

Would Teaching Initiations result it better long-term outcomes?



### What's That?

- Favorite items
- Opaque bag
- Prompt Query
- Label item
- Have child repeat label
- Provide Natural Reward
- Fade favorite items



### Additional Initiations

- Where is it?
- Whose is it?
- What's happening?
- What happened?
- Look!
- Help!



### Where is it?

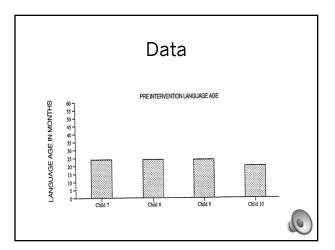
- Hide favorite items
- Prompt Child to Query
- Provide location (preposition)
- Child receives natural reinforcer

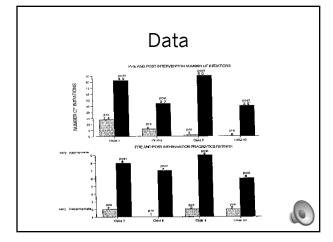


### Whose is it?

- Items associated with a member of family
- Prompt query
- Provide item







### Verbs

-ing ending

Past tense

- Use pop-up books of child's interests
- Manipulate tabs
- Prompt question



# Other Queries

- "Look"
  - Use favorite activities or items
  - Prompt "look"
  - Fade Prompt
- "Help"
  - Set up situations
  - Prompt "help"
  - Fade Prompt



## Summary

- Generalization to Home and School
- Learned targets as a result of the intervention
- Increased functions of language
- Improved social interactions



## Interactive Website

 $autism {\tt PRThelp.com}$ 

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Thank you!

