

Research Study – Inner Speech: Helping Children with ASD Improve Problem-Solving Skills and Deal with Stress

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Overview

- Purpose: Evaluate the effectiveness of therapy based on “inner speech” to improve independent problem-solving and emotional regulation, as reported by parents. (i.e., we were not studying behavior during therapy, but its carry-over to life away from treatment.
- Time frame: Parents were asked to complete a questionnaire about their child’s pragmatics behavior: Prior to therapy; after 3 weeks of therapy, and after 7 weeks of therapy. Planned to be an 8-week study, it actually took 15 weeks to complete due to weather (snow and roads), child illness, parent illness, therapist illness, or previously scheduled family or therapist vacations.

Therapy Goals for all Therapists

- PURPOSE: *“The purpose of this study to is study how therapy interventions improve children with autism’s ability to become an independent problem-solver and communicators. This will be evident by the child independently asking for help when confronted with a problem.”*
- The four language goals for the sessions included in the description were:
 1. *Child will makes appropriate pro-social comments such as: Hi, Bye, Thank you, etc. TWICE INDEPENDENTLY DURING THE SESSION.*
 2. *Child will gain the SLP’s attention by: calling her name, waiting for her to respond, and then continuing with the conversation (or question). TWICE INDEPENDENTLY DURING THE SESSION.*
 3. *When faced with an activity deemed challenging or stressful, the Child will independently ask for help TWO TIMES DURING THE SESSION.*
 4. *When asked opened questions such as (How was your day? What are you going to do next week? How was your holiday? How was your weekend? How was school? etc.), the Child will list 3 things she/he liked and 3 things she/he did not like abut the topic or the question.*

Research Participants

- Three Therapy Conditions:
 - Control conditions: 2 experienced therapists currently working in self-contained school-based settings for children with moderate to severe autism.
 - Treatment Condition: 2 therapists with no experience working with children with ASD other than their graduate school training and a practicum assignment with First Author (one a SLP-CFY; the other a graduate student).
 - First Author: The first author trained Treatment therapists; she has 14 years experience working with children with ASD.

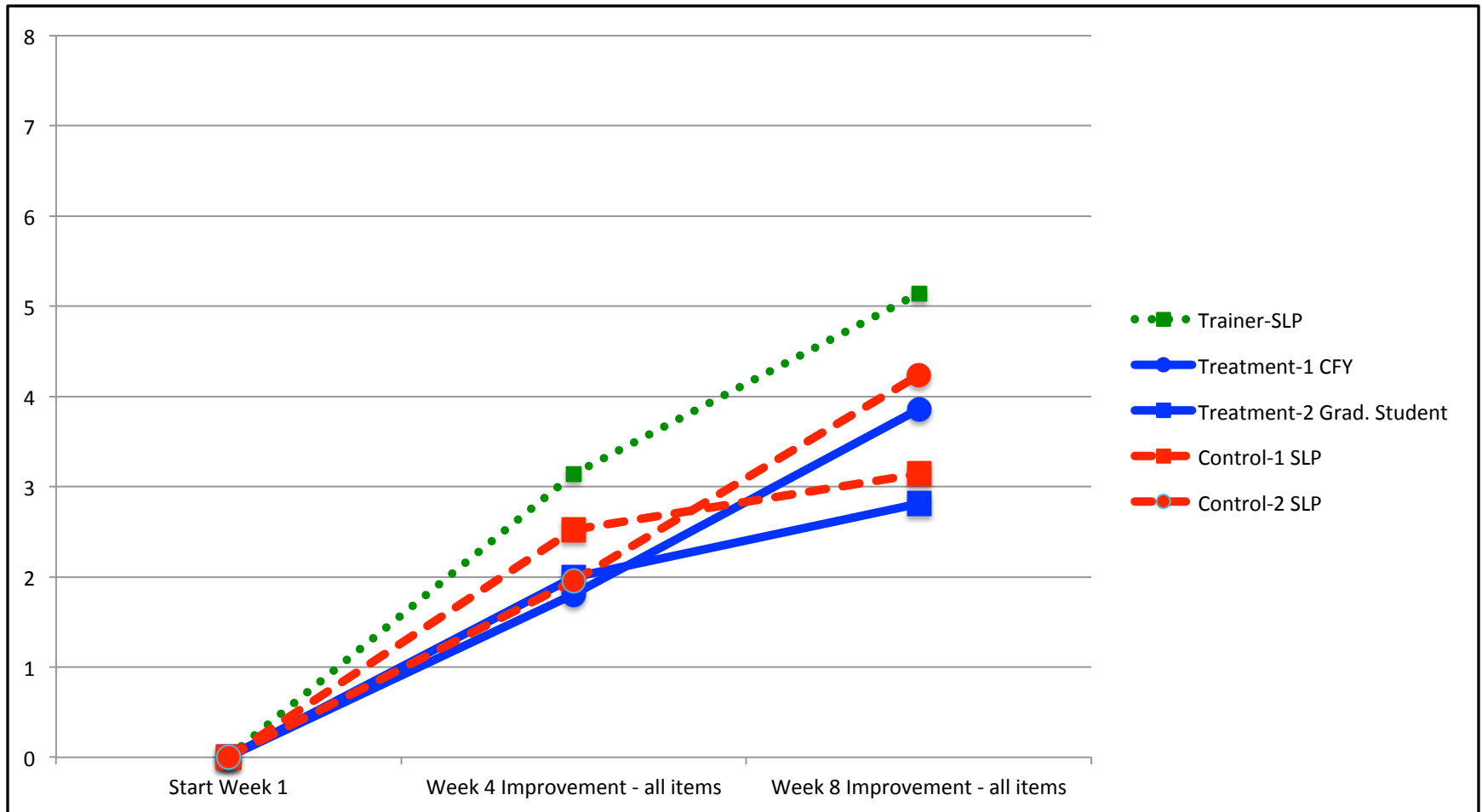
Parent Response Measure: 21-item Pragmatic Behavior Questionnaire

- Scales Related to Therapy Goals:
 - “States needs” Scale (2 items)
 - “Interactional” Scale (7 items)
 - “Stressful Situations” Scale (4 items)
 - “Asking for Help” item (1 item)
- Scales unrelated to Therapy Goals:
 - “Wants explanations” Scale (4 items)
 - “Shares knowledge and explanations” Scale (3 items)
 - “Gives directions to a game” (1 item)

Hypotheses

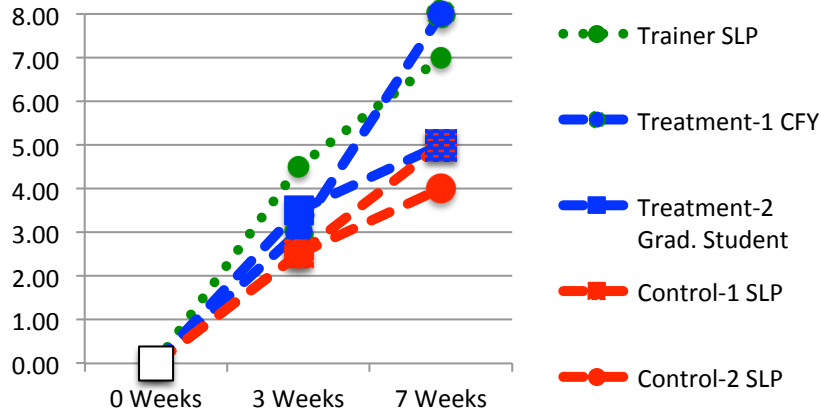
1. As a result of therapy, children's behavior would improve over time for all therapists regardless of treatment or experience.
2. Even though all therapists were given the same goals for therapy, those trained in the Cognitive Language Therapy (CLT) technique based on "inner speech" would show the greatest gains.
3. The effectiveness of CLT would extend to Pragmatic behavior not directly covered by the goals of the study.

Summary of 21 items on Pragmatics Questionnaire

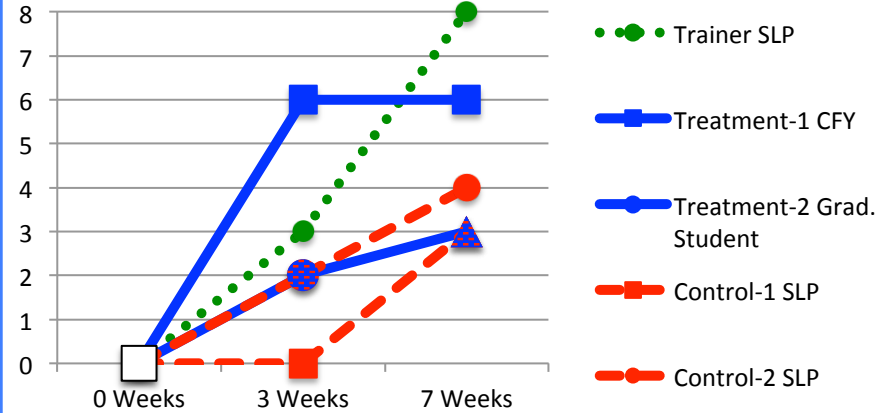


Scales Related to Goals – Dialoguing Speech

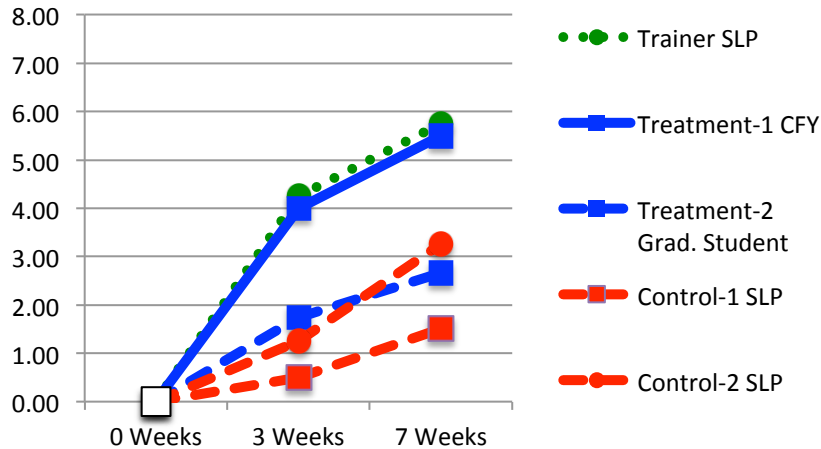
"States Needs" Improvement



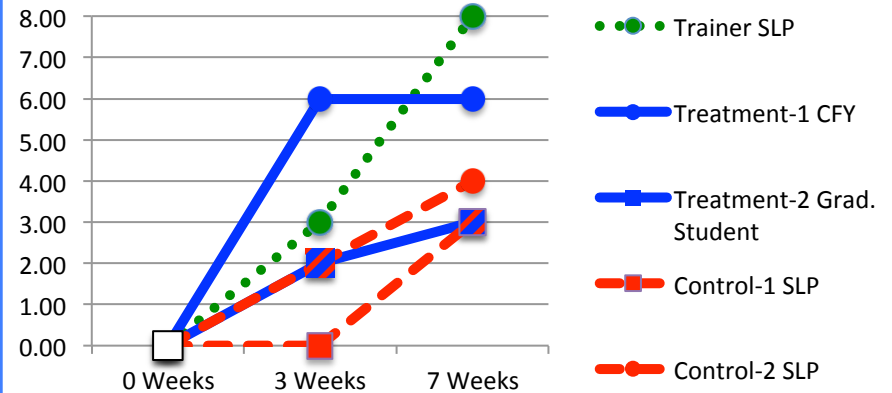
"Interactional" Improvement



Stressful Situation Improvement

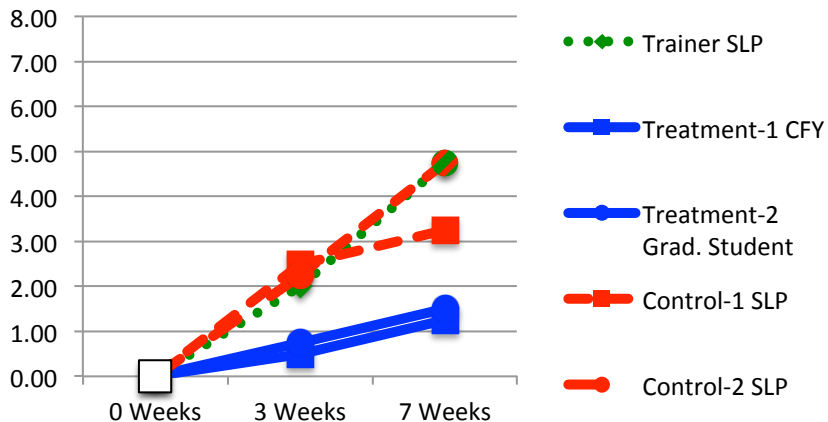


Item Improvement - "Asking for Help"

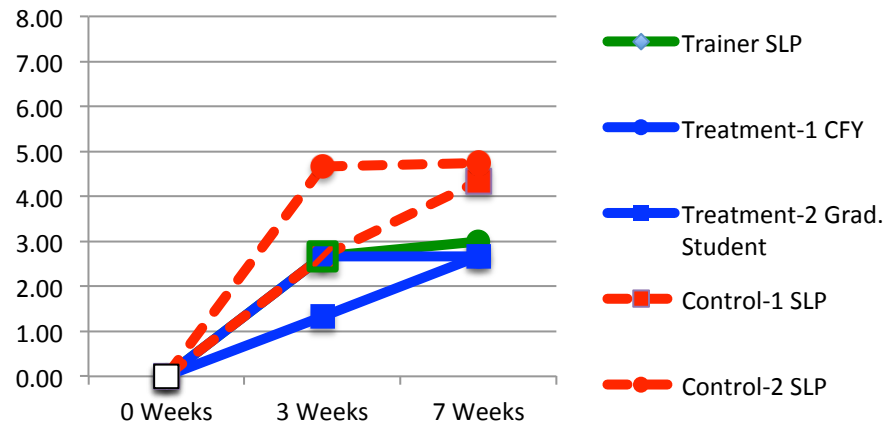


Scales unrelated to Goals – Monologuing Speech

"Wants Explanations" Improvement



"Shares Knowledge & Imaginations" Improvement



Item Improvement - "Gives Directions"

