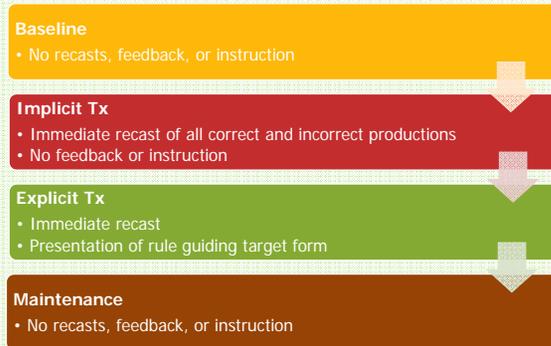


Introduction

- A subset of children with ASD demonstrates weaknesses in grammatical language similar to children with specific language impairment (SLI; Condouris et al., 2003; Leonard, Eyer, Bedore, & Grela, 1997; Rice & Wexler, 1996; Roberts, Rice, & Tager-Flusberg 2004).
- Interventions that use implicit models and recasts to teach grammatical forms have shown limited effectiveness for children with SLI (Fischer et al., 2010; Yamamoto & Miya, 1999).
- Finestack & Fey (2009) found that incorporating explicit instruction with traditional implicit approaches was more efficacious than using implicit approaches alone when teaching a novel grammatical form to children with SLI.
- The main purpose of the study was to determine if the use of an explicit, deductive teaching approach leads to more accurate use of true grammatical forms than an implicit, inductive approach for children with ASD.

- For each session, the participants listened to a short story that included 12 models of the grammatical target. Then they completed a play activity with at least 12 opportunities to produce the target form.



Participants

- Two monolingual English-speaking children with ASD. Parents reported concerns with language development.

Measure	Participant 1	Participant 2
Age	6:8	5:6
Leiter-R ^a SS ^b	67	70
SPELT-3 ^c SS	88	102
TACL-3 ^d SS	89	94
Target Form ^e (Accuracy)	"Do" questions (0%)	"Is/Are" questions (37%)

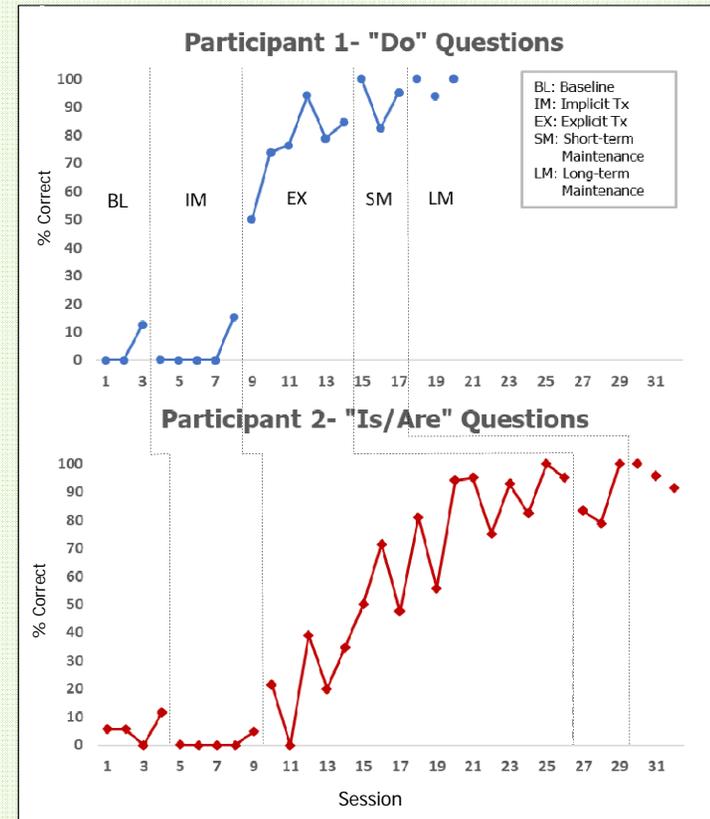
^a Leiter-R = Leiter International Performance Scale- Revised ; ^b SS = Standard Score
^c SPELT-3 = Structured Photographic Expressive Language Test- 3rd Edition
^d TACL-3 = Test for Auditory Comprehension of Language- 3rd Edition
^e Identified by the Rice-Wexler Test of Early Language Impairment prior to treatment

Method

- The study used a single-subject multiple baseline design replicated across two participants to compare two approaches to teach grammatical forms.
- Both participants completed the following phases: baseline sessions, traditional implicit treatment (models and recasts), and explicit treatment (addition of rule presentation).
- Short-term maintenance sessions occurred immediately following explicit instruction and long-term maintenance sessions occurred 1 week, 1 month, and 2 months following the last short-term maintenance session.

Results

- Both participants established 0-12% accuracy on their grammatical targets across baseline sessions. After switching to the implicit treatment phase, the accuracy on the target forms continued to stay low between 0-15%.
- Percent non-overlapping data (PND) between baseline and the implicit treatment phase was 20% for Participant 1 and 0% for Participant 2, indicating minimal to no difference between the two phases.
- Participant 1 showed a noticeable change in level from 15% to 50% immediately after switching to the explicit treatment. Additionally, the first four explicit treatment sessions displayed a pronounced upward trend from 50% to 94% accuracy.
- Participant 2 showed a relatively smaller magnitude of immediate change in level between the implicit and explicit phases (4% vs. 21%). Nevertheless, the explicit treatment sessions presented an upward trend from 21-95% accuracy.
- The PND between the implicit and explicit phases was 100% for Participant 1 and 94% for Participant 2, suggesting a substantial difference in treatment effectiveness between the implicit and explicit teaching approaches.
- Both participants maintained their target forms with 79-100% accuracy for the short-term maintenance sessions, and 91-100% for the long-term maintenance sessions.



Conclusions

- The findings support explicit treatment as an efficacious approach to teach grammatical forms to children with ASD.
- This evidence is consistent with previous group-design findings targeting novel morphosyntactic forms that demonstrate an advantage for explicit intervention approaches for children with SLI (Finestack & Fey, 2009).
- Researchers should continue to examine the use of explicit interventions when teaching language forms to children with ASD in large-scale studies.

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