

# Teaching Social Self-Initiations to Children with Autism to Improve Linguistic Targets

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## Abstract

In the context of a multiple baseline design, motivational procedures were used to teach the query "Whose is it?" to three children with autism. The purpose this study was to assess whether the children could be taught a child-initiated strategy that was absent in their repertoires, and if the child initiation would result in the acquisition of missing linguistic structures (i.e., "yours/ mine" or the possessive "s" ending). Results showed that the intervention was effective in teaching the query. In addition, all three children acquired the generalized use of the targeted linguistic structure to new settings, new people, and in response to new items. Results are discussed in relation to teaching child-initiated strategies, such as question-asking, to improve social initiations and collateral expressive language development.

## Background

- It is common for children with autism to have difficulties correctly using pronouns (Kanner, 1946).
- Children with autism lack social initiations such as question asking (Krantz & McClannahan, 1993; Rogers 2000).
- Initiations and questions are an essential part of social conversation, and are a tool to interact socially, clarify information, and to acquire vocabulary and other linguistic information (McTear, 1985; Seibert, Hogan, & Mundy, 1982)
- Teaching children to ask questions such as "What's that?" has been shown to increase social initiations and expand their vocabulary to formerly unknown words (Esbenshade & Ruiz, 2001; Koegel et al, 1998).

## Experimental Questions

- Can the question "Whose is it?" be taught, learned, and generalized?
- Will the use of this question result in improvements of linguistic structures, such as "yours/ mine" and the possessive "s" ending?

## Method

### Participants

- Three preschool children diagnosed with autism
- None demonstrated use of "Whose" questions
- Children 1 and 3 did not use possessive pronouns correctly.
- Child 2 did not use the possessive "s" ending.

### Setting

Intervention sessions were conducted in a clinic playroom containing preferred objects belonging to the child and neutral items belonging to the clinician or parent.

### Design

- Multiple baseline design across three children.
- Baselines ranged from 5-12 sessions while parents played naturally with their child and asked them "Whose is it?" about various items.
- Intervention sessions lasted 60 minutes, and occurred twice weekly.
- Generalization probes measuring the accuracy of pronoun/ possessive usage were taken after every fourth intervention session, and were conducted similarly to the baseline probes. These probes were taken in a novel room with a new clinician.

### Intervention

The clinician held up an object and verbally prompted the child to ask "Whose is it?" After several successful verbal prompts, the clinician held up the object, and provided a time delay for spontaneous question use. If the child asked the question, the clinician provided the answer (e.g. "It's yours"), and then immediately prompted the child to use the correct pronoun or possessive "s" ending (e.g. "It's mine" or "It's Mommy's"). When the child responded with appropriate linguistic target, he was given the object.

Figure 1. Unprompted "Whose is it?" questions during intervention sessions

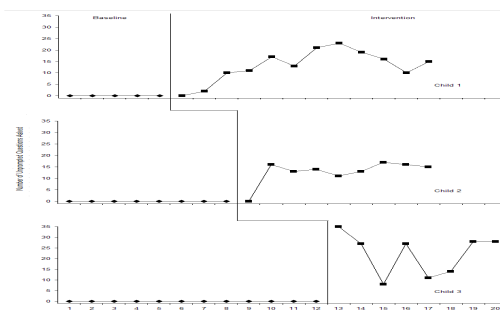
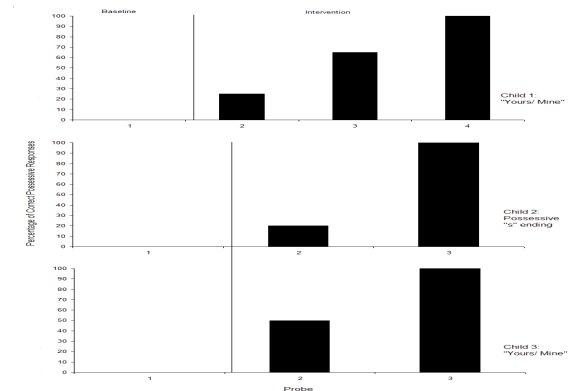


Figure 2. Percentage of correct possessive/ pronominal responses during generalization probes



## Results

- All children learned to ask "Whose is it?" during intervention sessions (Figure 1).
- All children reached 100% correct on their respective linguistic target (Figure 2).
- All parents reported that their children used the question "Whose is it?" in new settings and situations.

## Discussion

This study suggests that children with autism can be taught to ask questions, and also that learning this skill results in collateral effects in terms of linguistic gains. That is, the children were able to learn pronominal structures, something that is difficult for many children with autism. Further research could address other collateral gains the children might be making as a result of asking questions, teaching children more abstract questions such as "When", "Why", and "How," and the effects complex questions have dramatic effects on social behavior.

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