



Abstract

- A study was conducted to examine whether a naturalistic communication intervention implemented with fidelity would have a positive effect on language outcomes for three preschool aged boys with Autism.
- Teachers were trained in pairs on the intervention.
- Frequency data was recorded during 30 minute observations of adult-child interactions in the natural environment twice a week over a period of 6 months.
- Visual analyses of the results suggest that the naturalistic communication intervention increased language outcomes for children with Autism.
- A relationship between the teachers' fidelity of implementation and child communication was also identified.

The Use of a Naturalistic Communication Intervention to Promote Language Outcomes for Children with Autism

Sandra Hess Robbins, M.Ed.
Kent State University

Introduction



- The National Research Council (2001) has defined communication interventions as a top priority for children with autism
- Autism: A developmental disorder broadly defined by restricted behavior patterns and deficits in the areas of communication and social skills
- Naturalistic communication interventions are structured to follow a child's lead, to be embedded in the context of daily lives and routines, and to promote communication and social skills
- The purpose of this study was to determine if a naturalistic communication intervention implemented with fidelity would increase language outcomes for children with autism.



Participants

- Seven (7) adult participants
 - 2 preschool teachers, 1 speech and language pathologist, 1 graduate student, 1 student teacher, 2 undergraduate clinicians
- Three (3) child participants
 - Between 3 and 4 years of age
 - Diagnosed with autism
 - Attended preschool 4 days a week, 5 hours a day.



Setting

- Preschool Program for children with autism
- Research and Training Center in suburban Ohio
- Funded through University and Hospital grants
- 5 children with Autism- 6 typically developing peers
- Activity-Based / Child-Centered
- 2 / 1 Teacher child ratio

Measure

- Observational frequency data
- Interobserver agreement - 80%
- Adult Behaviors
 - Comments / labels / models
 - Asks questions
 - Expands on utterances / imitates
 - Uses positive feedback / prosocials / praise
- Child Behaviors
 - Gesture
 - Vocalization / approximation
 - Word / sign
 - Multword utterance



Research Questions

- Will teachers show an increase in their use of naturalistic communication strategies after receiving training, intervention manual with strategy definitions, and practical examples of how to implement the strategies with the target children?
- Will the children show an increase in their communication after the teachers implement the naturalistic communication intervention?
- Is there a relationship between the fidelity of implementation and child communicative behaviors?

Figure 1.1

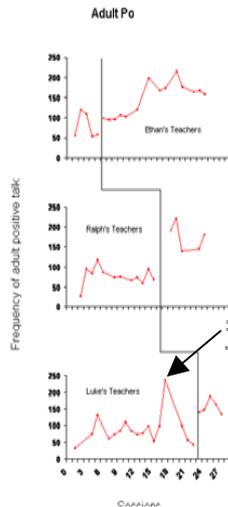


Figure 1.2

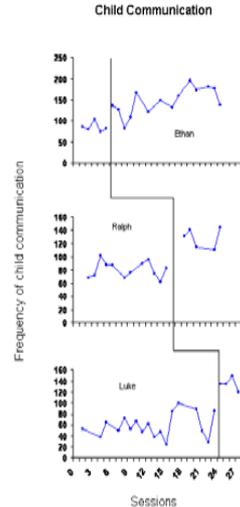
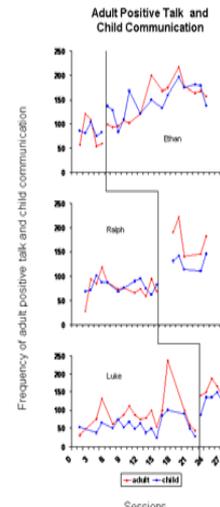


Figure 1.3



Procedures

- Permission obtained from directors and parents
- Two to three teachers assigned to each child
- Teachers trained in pairs at staggered times
- Manual: definitions, descriptions, and examples
- 30 minute observations of adult-child interactions in the natural environment
- Observations twice a week for 6 months

Design

- Single subject, multiple baseline across participants
- Baseline
 - Activity-based, responsive intervention
- Intervention
 - Naturalistic communication intervention
 - Comments / labels / models
 - Asks questions
 - Expands on utterances / imitates
 - Uses positive feedback / prosocials / praise
 - Follows the child's lead



Conclusion

- Practical implications
 - Naturalistic communication strategies with children who have autism
 - Embedding in the natural environment
 - Fidelity of implementation and data collection
 - Supporting community-based programs with manageable and usable interventions
- Future directions
 - Family involvement
 - Interdisciplinary training and professional development



Results

- Figure 1.1 presents the frequency data recorded for adult use of naturalistic communication strategies (i.e., positive talk composite). Compared to baseline, the teachers showed an increase in fidelity of implementation during the intervention condition.
- Figure 1.2 presents the frequency data recorded for child communication. Compared to baseline, all three children showed an increase in communicative behavior during the intervention condition.
- Figure 1.3 presents the combination frequency data recorded for both child communication and adult positive talk. Visual analysis of the results suggest that there is a relationship between fidelity of implementation and child communicative behaviors.