

Use of Skype to Teach Children with Autism to Answer Questions

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Introduction

Autism Spectrum Disorder (ASD) affects 1 in 88 children in the United States (CDC, 2012). Applied Behavior Analysis (ABA) is the best treatment option for ASD (Pierce & Cheney, 2008). Some individuals with ASD have better learning outcomes when technological visual aids are included in their training program (Charlop-Cristy & Kelso, 2003). Recently, teachers and therapists have begun to use video prompting and video modeling to supplement ABA programs (Sallows, & Graupner, 2005). In addition, researchers are now beginning to study the use of teleconference as a way to train parents to work with their child at home (Boisvert, Russell, Andrianopoulos & Boscardin, 2010). With limited availability of behavioral therapy services in remote areas, teleconference may enhance student outcomes through greater availability and frequency of services (Gibson, Pennington, Stenhoff, & Hopper, 2010).



Objective of Study

The objective of this exploratory study will be to determine whether desktop videoconference can be used to teach children with Autism to respond correctly to personal identification questions. Personal identification questions include questions about the child and his/her personal situation (e.g., the child's name, parents' names, school, and hair color).

Method

Participants

- Participants must have the following characteristics
 - Kindergarten/elementary school age
 - Diagnosis on the autism spectrum
 - Normal vision and hearing
 - Ability to use 2-3 word phrases
 - Vocabulary of at least 100 words
 - Ability to follow two-step directions
 - Ability to attend to tasks for at least 1 minute
- Parents in a facilitator role
 - Deliver non-contingent reinforcement to keep the child on task
 - Deliver tangible contingent reinforcement for correct answers

Materials

- Informed consent form
- Parent training manual and presentation
- Tangible reinforcers
- Desktop computers with Skype
- Data collection forms to document behavioral responses

Procedure

- **Reinforcement Assessment**
 - Brief multiple-stimulus preference assessment to determine effective reinforcers for participant
- **Baseline**
 - Assessment of participant's ability to answer personal identification questions
 - No contingent reinforcement provided
 - Noncontingent reinforcement for participation in task
- **Intervention**
 - Training to correctly answer personal identification questions
 - Each question asked 4 times/session
 - Positive reinforcement for correct answers
 - Correction for incorrect answers
 - Intervention for 4 days/week until criterion (75% correct)
- **Post-Intervention**
 - Assessment of participant's ability to answer personal identification questions 2 weeks after intervention

Discussion & Conclusions

Data collection is currently under way. Given that previous research supports the use of computerized tools for teaching children with ASD (e.g., Charlop-Cristy & Kelso, 2003; Sallows & Graupner, 2005), it is expected that using desktop videoconference will be effective for training children with ASD to answer personal identification questions. Anticipated results are that participants will meet the criterion of 75% correct for learning to answer personal identification questions and that participants will maintain their learning for two weeks beyond the end of the intervention.

If successful, this study will demonstrate that it is possible to use desktop videoconference to augment current ABA techniques. Using desktop videoconference may allow for more treatment hours for families who live in remote areas and for exploring nontraditional strategies for delivering services to children with Autism.

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