EFFECTS OF A MULTIFACETED TRAINING PROCEDURE ON THE SOCIAL BEHAVIORS OF HEARING-IMPAIRED CHILDREN WITH SEVERE LANGUAGE DISABILITIES: A REPLICATION

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The effectiveness of a training package on the social behaviors of 20 hearing-impaired children with severe language disabilities was assessed. The package consisted of initial instruction in role-play situations, reinforcement of appropriate instances of the behaviors, and a correction procedure following inappropriate instances of the behaviors. Results showed that the training package was effective in increasing greeting, turn waiting, initiating interaction, and giving help and these effects were maintained over several weeks.

DESCRIPTORS: social skills, hearing-impaired children

Although numerous studies have documented deficits in the acquisition of social behaviors by hearing-impaired persons, few studies have been conducted to correct such deficits. Rasing and Duker (1992) demonstrated the effectiveness of a training package on the acquisition and generalization of social behaviors by hearing-impaired children with language disabilities. This package included introductory instruction, modeling, role playing, and problem-solving instruction; positive reinforcement of each appropriate instance of the target behaviors; and correction following each inappropriate instance of the target behaviors. The purpose of the present study was to replicate and assess the effectiveness of the training package on the social behaviors of a larger number of hearing-impaired children with severe language disabilities and its effectiveness for other behaviors. Furthermore, to enhance the practicality of the package, the problem-solving lessons were withheld.

METHOD: The participants were 4 boys and 16 girls with severe to profound hearing loss, severe language disabilities, and average to above-average intelligence. They ranged in age from 7 years 1 month to 13 years 9 months and were selected on the basis of their behavioral deficits (as indicated by their teachers and residential staff members). They were enrolled in six different classes of three or four children each at a residential school for the deaf. Eleven participants resided at the institution in one of three residential groups. The others lived with their parents. Oral communication with the children was augmented by finger spelling and written language.

The teachers and residential staff members selected the following target behaviors: greeting, turn waiting, initiating interaction, and giving help. They also defined appropriate and inappropriate instances of these target behaviors. A description of these instances is available from the author.

Data for greeting were collected when the children entered and left the manual training room and their dayroom at lunch time and were measured using event recording. Turn waiting was videotaped in the classroom during grammar lessons for 20 min and was measured using an 8-s partial-interval recording procedure. Initiating interaction and giving help were videotaped during manual training and in the children's dayroom during lunch for 20 min, and were measured using event recording. Observer training and measures to control for observer drift and bias were similar to those of our previous studies. Interobserver agreement was obtained in 39% of the recording sessions. Mean percentage agreement between observers was 85% (range, 64% to 100%) for greeting, 81% (range, 54% to 100%) for turn waiting, 83% (range, 47% to 100%) for initiating interaction, and 80% (range, 0% to 100%) for giving help.

A multiple baseline design across four target behaviors was used to evaluate the effectiveness of the intervention. The training procedures were identical to those of our previous studies, except that the problem-solving lessons were withheld. The intervention consisted of (a) three 30-min introductory lessons given by the teacher involving modeling the behaviors and consequences in role-play scenes, (b) praise and token reinforcement following each appropriate instance of the target behavior, and (c) pointing to a poster with drawings of a problem-solving procedure following each occurrence of an inappropriate instance of the target behavior. Teachers and staff members provided the children with contingent reinforcement and administered the correction procedure during school hours and when the children were in the residential group, respectively. Directed supervision, feedback, and goal setting were used with teachers and staff members to facilitate their implementation of reinforcement and correction. During follow-up, teachers and staff members were prompted to continue praising appropriate instances and to remind the children of the appropriate instances when they showed inappropriate ones.

The six teachers and six staff members of two living groups completed a social validation questionnaire. They reported the training package to be effective in improving children's performances for greeting and giving help. Four teachers and the six staff members also reported the training package to be effective in improving the performance of turn waiting and initiating interaction.

RESULTS AND DISCUSSION: Percentages of appropriate target behaviors were calculated by dividing the number of occurrences (or intervals for turn waiting) of appropriate instances by the total number of occurrences (or intervals) of appropriate and inappropriate instances, multiplied by 100%. The figure shows that the mean percentage of appropriate target behaviors in the classroom increased as a function of training and remained above baseline levels during follow-up, although the mean percentage of appropriate greeting declined. For the residential group, the mean percentage of appropriate occurrences of the three target behaviors also increased following training and remained above baseline levels during follow-up. The individual data for all children in the class and in the residential group reveal a similar pattern.

A limitation of this study is the recording of the data by observers who were unfamiliar with finger spelling. However, perhaps because of the nonverbal nature of the target responses, the degree of agreement between the observers could be considered satisfactory in most instances.

These findings replicate and extend our previous findings with a larger group of individuals and with two other target behaviors, greeting and giving help.

This study shows the effectiveness of the training package used in our previous studies (without the problem-solving lessons) on the social behaviors of hearing-impaired children with severe language disabilities.

REFERENCES

- Rasing, E. J., & Duker, P. C. (1992). Effects of a multifaceted training procedure on the acquisition and generalization of social behaviors in language-disabled deaf children. *Journal of Applied Behavior Analysis*, 25, 723-734.

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