### TRAINING RESIDENTIAL SUPERVISORS TO PROVIDE FEEDBACK FOR MAINTAINING STAFF TEACHING SKILLS WITH PEOPLE WHO HAVE SEVERE DISABILITIES

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We evaluated procedures for training supervisors in a residential setting to provide feedback for maintaining direct-service staff members' teaching skills with people who have severe disabilities. Using classroom-based instruction and on-the-job observation and feedback, 10 supervisors were initially trained to implement teaching programs themselves. The training improved supervisors' teaching skills but was insufficient to improve the quality of feedback they provided to direct-service staff regarding the staff members' teaching skills. Subsequently, classroom-based instruction and on-the-job observation and feedback that targeted supervisors' feedback skills were provided. Following training in provision of feedback, all supervisors met criterion for providing feedback to their staff. Results also indicated that maintenance of teaching skills was greater for direct-service staff whose supervisors had received training in providing feedback relative to staff whose supervisors had not received such training. The need for analysis of other variables that affect maintenance of staff performance, as well as variables that affect other important areas of supervisor performance, is discussed.

DESCRIPTORS: organizational behavior management, supervisory strategies, maintenance, feedback, staff

Despite the availability of a comprehensive staff training technology, a prevalent concern of researchers and practitioners is lack of skill maintenance following training (Fleming & Sulzer-Azaroff, 1989). Supervisory feedback following staff training is generally considered to be an important variable in maintaining staff performance (Fleming & Sulzer-Azaroff, 1989). Although the behavior-change function of supervisory feedback has been demonstrated repeatedly, incorporating supervisory feedback into service settings remains problematic (Harchik, Sherman, Hopkins, Strouse, & Sheldon, 1989). Training supervisors in feedback skills may enhance the use of supervisory feedback and, in turn, the maintenance of staff performance.

In settings serving people with developmen-

Appreciation is expressed to Martin Ivancic, Joyce Jensen, and Bill Helsel for their comments on an earlier draft of the manuscript and to Mary Keller for her assistance in preparing the paper.

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tal disabilities, correct implementation of teaching procedures is an essential skill for directservice staff. Nevertheless, lack of proficiency in the use of teaching procedures by direct-service staff has been well documented (Parsons, Reid, & Green, 1993). Supervisory feedback may be a means of maintaining proficient teaching performance. To date, however, only a few investigations have experimentally validated procedures for training supervisors to give feedback to maintain staff teaching skills. Furthermore, investigations involving supervisor performance have focused on professional personnel (e.g., Goncalves, Iwata, & Chiang, 1983; Page, Iwata, & Reid, 1982). Research that demonstrates training strategies with supervisors who do not have extensive preservice training backgrounds is warranted. The primary purpose of this investigation was to evaluate a program for training paraprofessional supervisors to provide feedback regarding the teaching skills of direct-service staff. A secondary purpose was to evaluate supervisors' use of feedback on maintenance of staff teaching performances.

### **METHOD**

# Setting, Participants, and Program Background

One male and 9 female supervisors in a residential facility for people with severe disabilities participated. All supervisors had a high school degree, and 2 had attended up to 2 years of college. Each participant supervised approximately 10 direct-service staff, and all worked in one of three administrative areas of the facility. This area was chosen because the majority of supervisors had worked in their current position for at least 1 year and the area administrator had expressed interest in obtaining training for her supervisors.

All new direct-service staff at the facility received training in how to teach clients through the Teaching-Skills Training Program (Parsons et al., 1993). Once a staff member had met a performance criterion (80% correct teaching behavior with two client programs), supervisors were expected to monitor his or her teaching at least monthly.

### Behavior Definitions

The target skills of the teaching-skills program consisted of four performance areas: order of teaching steps in a task analysis, least-to-most assistive prompting, reinforcement, and error correction (Parsons et al., 1993). Feedback provided to staff following an observation of a teaching session with a client involved eight components. The first component was to begin by setting a positive tone for the feedback session by making a positive or empathetic statement regarding the session. Supervisors were then to provide performance-specific feedback beginning with positive feedback and praise (Component 2) and to provide appropriate praise (Component 3) by accurately describing and praising at least one teaching skill performed correctly. Next, the supervisor was to identify each category of teaching skill in which any errors were made (Component 4) and describe how the skill should be performed (Component 5). After feedback had been given, supervisors were to solicit questions from the staff trainee (Component 6) to insure that the trainee understood the feedback. The seventh component was to discuss what should happen next based on the observation. The supervisor was to indicate the need to observe a teaching session again if the trainee performed poorly or that additional observations were not needed if the trainee met criterion. The eighth component was to end the session with a positive statement.

### Observation Procedures and Reliability

Observations occurred in the living unit while a supervisor conducted a teaching program with a client. An observer recorded the correct or incorrect performance of the four target teaching skills for each step in the client's task-analyzed program. Reliability measures were taken during 14% of all observations of supervisor teaching sessions and was calculated on a step-by-step basis by dividing the number of agreements by the number of agreements plus disagreements and multiplying by 100%. Interobserver reliability averaged 95% for overall agreement (range, 89% to 100%), 91% for occurrence (range, 80% to 100%), and 73% for nonoccurrence (range, 0% to 100%).

Observations of feedback delivery occurred while a supervisor provided feedback to a staff member immediately after observing the staff member implement a teaching program with a client. The observer recorded the supervisor's correct or incorrect presentation of the eight feedback components. Reliability checks were made during 24% of the sessions and averaged 86% for overall agreement (range, 63% to 100%), 73% for occurrence (range, 33% to 100%), and 79% for nonoccurrence (range, 40% to 100%).

# Experimental Conditions

Baseline. Throughout baseline, no feedback was provided to supervisors regarding teaching or feedback skills. A demonstration of at least

80% correct performance for two teaching and feedback sessions was the performance criterion. One supervisor, Cassy, transferred to the area after most baseline observations had been completed; thus, only one baseline observation of her feedback skills could be obtained.

Teaching-skills program. All supervisors completed the classroom portion of the teachingskills program even if they met criterion during baseline to insure that supervisors were aware of the training received by new staff and to encourage supervisors to use the same terminology to describe teaching procedures. The teachingskills program for supervisors involved 4 hr of classroom training followed by observations of supervisors' teaching skills with clients (Parsons et al., 1993). Observations were conducted as in baseline, except that supervisors were given immediate feedback regarding their teaching skills, with the same format supervisors would be taught to use when providing feedback to their staff. Observations and feedback continued until each supervisor met criterion. Once supervisors met the teaching criterion, the feedback skills of 7 supervisors were again observed as in baseline while they monitored and provided feedback to a staff member conducting a teaching program with a client. Because completion of the teaching-skills program did not result in improved feedback for 6 of the 7 supervisors, feedback skills were not monitored for the remaining supervisors until after the feedback program had been implemented.

Feedback program. The feedback program was intended to train supervisors to observe a teaching session systematically and to provide feedback to the staff member regarding teaching proficiency. Four hours of classroom instruction were designed to familiarize supervisors with procedures for monitoring staff teaching skills and the eight components for giving feedback. Initially, the definition for each category of teaching skills was reviewed; this was followed by practice of systematic observation procedures using role-playing techniques. Next, a written handout describing the eight feedback compo-

nents was discussed; this was followed by practice in presenting feedback through role-playing techniques. Following classroom training, observations of supervisors' feedback skills occurred in the living area as in baseline, except that supervisors received feedback regarding performance of the eight feedback components.

Follow-up evaluation of supervisory feedback training on staff members' teaching skills. To evaluate the effects of supervisor training on the maintenance of staff members' teaching skills, follow-up observations were conducted with staff members who had completed the teaching-skills program the previous month. Four of these staff members worked in living units with supervisors who had completed the feedback program. For the short-term maintenance measure, this target group was observed an average of 42 days (range, 40 to 46) following completion of the teaching-skills program. The long-term maintenance measure occurred after an average of 82 days (range, 51 to 95) had passed.

Four staff members from the same class as the target group, but who worked in living units with supervisors who had not participated in the feedback program, served as a comparison group for the short-term maintenance evaluation. One observation of each staff member in the comparison group occurred an average of 40 days (range, 28 to 47) following completion of the teaching-skills program.

A third group represented the comparison group for evaluation of long-term maintenance. The group included 4 staff members who had completed the teaching-skills program and had been observed one time each during baseline observations of supervisors who would later complete the feedback program (i.e., they worked for supervisors in the study before the supervisors had received training on feedback). The number of days since completing the teaching-skills program for this comparison group averaged 72 (range, 56 to 84).

Reliability checks occurred during 31% of the maintenance observations involving all groups. Interobserver reliability averaged 99% (range, 93% to 100%) for overall agreement of correct teaching behaviors, 98% (89% to 100%) for occurrence, and 97% (86% to 100%) for nonoccurrence.

# Acceptability

Following completion of the feedback program, supervisors from the first two training groups completed an eight-question acceptability survey. Using a Likert scale, supervisors rated the helpfulness and likability of the feedback program.

# Experimental Design

A multiple probe design across two groups of supervisors was used to assess the effects of the teaching-skills program on the supervisors' teaching and feedback skills. The same design was used across three groups of supervisors to evaluate the effects of the feedback program on feedback skills.

#### RESULTS

The teaching skills of 5 supervisors were not observed following the teaching-skills program because they met criterion for teaching during baseline. Only one baseline observation of Cassy's teaching skills was obtained, as noted earlier; therefore, there was no evaluation of the effects of the program on her teaching behavior. The average for the 4 supervisors who did not meet the teaching criterion during baseline was 64% correct teaching behavior (range, 50% to 79% across participants); this increased to 93% (range, 89% to 97%) following completion of the teaching-skills program. All supervisors met the teaching criterion within three on-unit sessions.

During baseline no supervisor met the performance criterion for feedback provision (M = 41%; range, 0% to 75% across all observations; Figure 1). When feedback skills were observed after completion of the teaching-skills program, only Flo met criterion. Feedback skills for Donna, Carol, Bob, Irene, Sherry, and Rita averaged

53% (range, 13% to 83%) following completion of the teaching-skills program. However, the average percentage of correct feedback for all supervisors increased to 86% (range, 38% to 100%) following completion of the feedback program. Of the 9 supervisors who had not met criterion before completing the feedback program, all but 1 met criterion within four observation and feedback sessions.

For the target group of 4 staff members, short-term follow-up observations indicated 100% correct teaching behavior, whereas the comparison group averaged 72% (range, 56% to 88%) with only 1 of 4 maintaining the 80% performance criterion. When the target group was observed for long-term maintenance, correct teaching averaged 94% (range, 75% to 100%), with 3 of 4 staff members correctly performing 100% of the skills. The correct teaching behavior of the long-term comparison group averaged 67% (range, 50% to 100%), with only 1 staff member maintaining the 80% criterion. Follow-up probes of 3 supervisors' feedback 23 to 40 weeks after completion of the feedback program indicated maintenance of their feedback skills well above pretraining levels. All supervisors who completed the acceptability survey gave the program the highest rating for likability and helpfulness.

#### DISCUSSION

When the feedback program followed the teaching-skills program, improvements occurred in the feedback provided by paraprofessional supervisors to direct-service staff regarding their teaching skills. Moreover, the supervisors' feedback appeared to enhance the maintenance of the staff members' teaching skills.

Although improvements in supervisors' teaching skills occurred following the teaching-skills program, consistent improvements in feedback skills did not occur until they were directly targeted using instruction and on-the-job feedback. A practical implication of this finding is that staff members who are promoted

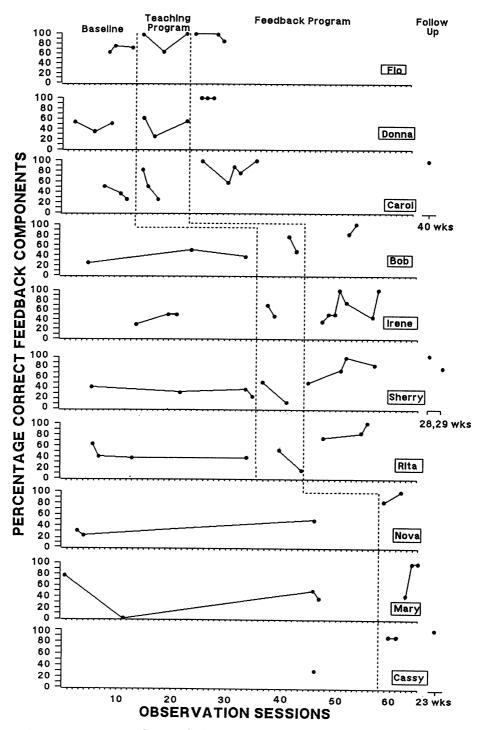


Figure 1. Percentage occurrence of correct feedback behavior for each supervisor, observation session, and experimental condition.

to supervisor because of exemplary direct-service skills should not necessarily be expected to demonstrate proficient supervisory skills without receiving training on those skills.

Although measuring the effects of supervisor training in terms of client gains would have been desirable, inclusion of three levels of performance measures (supervisor, staff, and client) in one investigation represents a labor-intensive research strategy; this may be one reason for the relative lack of research on supervisor behavior. The alternative research model used here was to document the effectiveness of staff implementation of target procedures on measures of client welfare before conducting research on supervision of those procedures; our previous research showed that when staff members implemented the teaching procedures targeted in this study with at least 80% proficiency, concomitant gains in clients' skills occurred (Parsons et al., 1993).

As procedures for training supervisory skills are evaluated, additional research on the acceptability of the various procedures among staff and supervisors seems to be warranted. Procedures that are more acceptable to supervisors are more likely to be implemented. The methodology for evaluating acceptability also needs further analysis. In the current study, supervisors rated training as highly acceptable using a Likert scale. However, recent research has indicated that more behavioral measures, such as choice of procedures for future use, may provide a more valid acceptability measure (Reid & Parsons, 1995).

Although this investigation demonstrates one system for maintaining direct-service staff mem-

bers' teaching skills, continued work is necessary. Unless organizational support systems are developed to reinforce supervisors' use of their newly acquired feedback skills, those skills—like the skills of their staff—are not likely to be maintained. Identification of variables that affect supervisors' continued use of functional supervisory skills represents an area for future investigation.

### REFERENCES

Fleming, R. K., & Sulzer-Azaroff, B. (1989). Enhancing quality of teaching by direct care staff through performance feedback on the job. *Behavioral Residential Treatment*, 4, 377–395.

Goncalves, S. J., Iwata, B. A., & Chiang, S. J. (1983). Assessment and training of supervisors' evaluative feedback to their staff in an operant learning program for handicapped children. Education and Treatment of Children, 6, 11–20.

Harchik, A. E., Sherman, J. A., Hopkins, B. L., Strouse, M. C., & Sheldon, J. B. (1989). Use of behavioral techniques by paraprofessional staff: A review and proposal. *Behavioral Residential Treatment*, 4, 331– 357.

Page, T. J., Iwata, B. A., & Reid, D. H. (1982). Pyramidal training: A large-scale application with institutional staff. *Journal of Applied Behavior Analysis*, 15, 335–351.

Parsons, M. B., Reid, D. H., & Green, C. W. (1993). Preparing direct service staff to teach people with severe disabilities: A comprehensive evaluation of an effective and acceptable training program. *Behavioral Residential Treatment*, 8, 163–186.

Reid, D. H., & Parsons, M. B. (1995). Comparing choice versus questionnaire measures of the acceptability of a staff training procedure. *Journal of Applied Behavior Analysis*, 28, 95–96.

Received March 9, 1994
Initial editorial decision May 6, 1994
Revisions received July 6, 1994; September 30, 1994;
March 13, 1995
Final acceptance March 13, 1995
Action Editor, Anthony J. Cuvo