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## STAFF MANAGEMENT BY BEHAVIORAL CONTRACTING\*

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Employee performance has been shown to be improved by reinforcement procedures that are determined by the supervisor. The present study used behavioral contracting between an employee and her supervisor to structure their discussion in arriving at mutually acceptable performance standards and reinforcers. A multiple baseline design across responses was used with an employee who conducted training sessions with persons who are mentally retarded in a large institution. The results showed an improvement of the specific employee behaviors for which behavioral contracting was arranged for the duration of the contracted reinforcement. Behavioral contracting may be useful as a structured method of achieving employee-supervisor agreements in employee motivation programs.

### INTRODUCTION

Behavioral treatments have been found to be effective with institutionalized persons with mental retardation or mental illness for problems such as toilet training (Azrin & Foxx, 1971; Foxx & Azrin, 1973), behavioral stereotypy (Azrin, Kaplan, & Foxx, 1973),

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functional ward behavior (Ayllon & Azrin, 1968, and mealtime conduct (Hendrickson & Doughty, 1967). To assure employee performance in conducting these effective training programs in large institutions, special employee motivation methods have been required as noted in one of the earliest descriptions of an institutional program in which the employees were given job privileges as reinforcement for meeting the standards of employee performance (Ayllon & Azrin, 1968). Systematic studies have since been conducted showing that employee absenteeism can be reduced (Stephens & Burroughs, 1978; Pedalino & Gamboa, 1974; Shoemaker & Reid, 1980), job performance increased (Pommer & Streedbeck, 1974; Patterson, Griffin, & Panyan, 1976; Hollander & Plutchik, 1972) and staff-patient interaction increased (Iwata, Bailey, Brown, Foshee & Aldern, 1976; Buel & Born, 1977; Pomerleau, Bobrove, & Smith, 1973).

In the behavioral studies of employee performance, the supervisor or experimenter has typically decided unilaterally what reinforcers would be given and what the standard of performance would be for earning that reinforcement. On the other hand, informal comments by the reports' authors, and general discussions of behavioral management programs (Luthans & Kreitner, 1975; Morasky, 1982) indicate that extensive informal prior discussions should occur with the employees and supervisor regarding the standards of performance and the nature of the reinforcers. A formal method for structuring discussions to obtain agreement has been widely used in other areas of behavioral psychology, namely behavior contracting which has been used for a variety of problems including marital dysfunction (Stuart, 1969; Azrin, Naster, & Jones, 1973), classroom performance (Goldman, 1978, Besalel-Azrin, Azrin, & Armstrong, 1977), and youth problems (Besalel & Azrin, 1981). The use of behavioral contracting in employee motivation programs should provide a means of structuring the discussion between the employee and supervisor in order to produce mutually acceptable standards of performance and the selection of effective reinforcers.

#### METHOD

This study was conducted at a large state residential facility for the developmentally disabled. Self-help skills training of the residents occurred from 9:30-11:00 a.m. and from 1:30-3:30 p.m. on weekdays.

### Subject

The employee who served as a subject was a 25-year-old woman with a high school education who had worked at the institution for three years. She was responsible for training the residents in her unit and for data collection regarding training progress. She was supervised, along with many other employees, by a 40-year-old woman, the unit supervisor, who had a high school education and had worked at the facility for 10 years. The supervisor was responsible for overseeing all activities within the unit. She scheduled the work-days and off-days of the staff, scheduled staff break and lunch times, was responsible for assuring that the employees provided training as scheduled, and supervised their collection, compilation, and summary of the training data.

### Recording

Observations were conducted daily at randomized times during the two training sessions, morning and afternoon, that were conducted on 3 weekdays per week. Ten observations were made by the experimental observer per training session, each observation consisting of a 5-10 second "walkthrough" of the area where training was to occur. After the walkthrough, the experimental observer scored a data sheet as to the presence or absence of each of the training behaviors. The four training behaviors were: (1) the presence of the employee at the prescribed time and site for the training session, (2) presence of edible reinforcers during training, (3) presence of the data collection materials (clipboard, data sheets) during training, and (4) positive interaction between the employee and the resident, defined as manually guiding, stroking, or touching, verbally instructing, or conversing with the client. These behaviors were an institutional requirement for the employees in conducting the training.

### Experimental Design

The experimental design was a multiple-baseline across behaviors. Baseline recording occurred during the first week. During the second week, the first two behaviors were scheduled for reinforcement.



### Recording Reliability

Interrater reliability of recording was ascertained by having two observers independently score the behavior on 27% of the observations. Both observers were third year doctoral students in clinical psychology who had been trained and had experience in behavioral observation and data collection. Interrater agreement was 99.6% between the two observers for the four behaviors chosen.

### Contracting

After completion of the 1-week baseline the employee, supervisor, and experimenter negotiated the behavioral contract. The employee was provided by the experimenter with an example of a reinforcer that the employee might request: to have a Saturday and Sunday off on one week rather than the usual Wednesday or Thursday.

The reinforcers that were agreed to by the employee and supervisor for successfully exhibiting each of the training behaviors were: (1) leave work one hour early on one afternoon the following week, (2) have one weekend off during the following month, (3) take clients of her choice outside for 30 minutes after lunch daily for one week, and (4) leave work one hour early on one afternoon the following week. The criterion for attaining each of the contracted behaviors must have occurred for an average of 75% of the observations for the previous week in order for the reinforcers to be earned. The behavioral contract was negotiated on a Friday. On each of the following two Fridays, the employee and supervisor met and reviewed progress and scheduled the reinforcers earned during the previous week.

The contracting procedure followed the guidelines described previously for marital and parent-youth (Azrin et al., 1973, Besalel & Azrin, 1981) behavioral contracting:

#### A. *Stating the Problem*

- (1) The problem should be stated in *impersonal terms* in order to focus concern on the situation rather than on the person. To be omitted were the word "you" or "I" if possible since personalization during the problem statement is likely to be accompanied by annoyance in

"I" statements and implicit criticism in "you" statements.

Example: *Not*, "I don't like your forcing me to work every weekend."

*Better*, "Working every weekend doesn't give time for family life."

- (2) The statement should describe *what positive benefit* (reinforcer) will result, again avoiding any implicit anger or annoyance.

Example: *Not*, "I'm very upset about the regularity of the training of the residents."

*Better*, "Faster learning of the residents will occur if there is regularity of the training."

#### B. Making the Request

- (1) The request should designate a *positive, not negative* action.

Example: *Not*, "I want you to stop taking so many coffee breaks."

*Better*: "I want you to be present at all scheduled training sessions."

- (2) The request should designate *behavior* not a *trait*.

Example: *Not*, "I want you to be more flexible."

*Better*, "I want to arrive and leave one-half hour early."

- (3) The request should be *specific, not general*, as to the behavior.

Example: *Not*, "I want you to interact with the trainee."

*Better*, "I want you to be guiding, touching, or talking to the trainee at least 50% of the time."

#### C. Responding to the Request

- (1) Do not refuse outright; but rather first state *what part of the request or problem you agree with*—if total agreement is not possible.

Example: *Not*, "No, I won't do that. It's too much trouble."

*Better*, "You're right about needing some records."

- (2) Make a counter-request that you would prefer, rather than describing aspects of the request with which you disagree.

Example: *Not*, "I can't give you every weekend off or give you a raise."

*Better*, "I can give you every other weekend off and a letter of commendation in your file."

The final contract reached was as follows:

*Contract for Training Behaviors*

- I. The employee will be present in the training room with the trainee from 9:30-11.00 a.m. and from 1:30-2:30 p.m. on an average of 75% of observations . . . In exchange, the supervisor will allow the employee to leave work one hour early (at 1:30 p.m.) on one afternoon the following week providing no breaks are taken during the regular shift.
- II. The employee will have the data collection materials present during the training sessions on an average of 50% of observations . . . In exchange, the supervisor will arrange the work schedule so that the employee will have one weekend off during the following month.
- III. The employee will have the snack reinforcers present during the training sessions on an average of 50% observations . . . In exchange the supervisor will allow the employee to take clients of the employee's choice outside for 30 minutes after lunch on a daily basis the following week.
- IV. The employee will be engaged in a positive interaction with clients (defined as giving verbal instructions, conversing, stroking, or physically guiding through training) during the training sessions on an average of 50% of observations . . . In exchange the supervisor will allow the employee to leave work one hour early (at 1:30 p.m.) on one afternoon the following week providing no breaks are taken during the regular shift.

## RESULTS

Figure 1 shows the percentage of observations in which the employee performed appropriately for each of the four employee behaviors. During the baseline recording of the first week, 3 of the

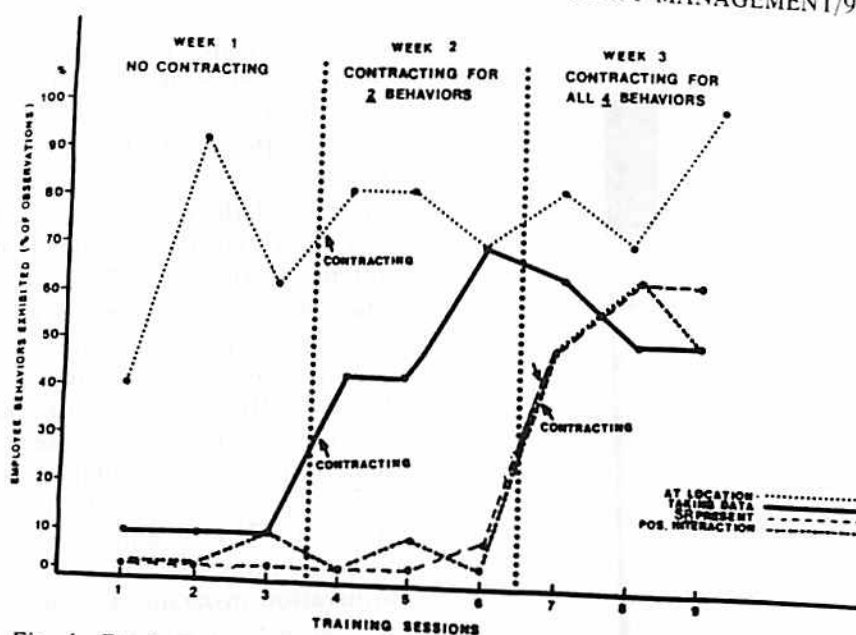


Fig. 1. Employee performance and behavioral contracting. An employee's level of performance of each of 4 behaviors involved in conducting training sessions for retarded persons. The ordinate designates the percent of observations in which the behavior occurred. The first week was a baseline period. At the 2 arrows during the second week, the behavioral contracting was begun for the 2 behaviors designated; at the 2 arrows during the third week, contracting began for the other 2 behaviors as well such that all 4 behaviors were contracted during the third week.

employee behaviors were being performed an average of 10% or less of the observations, the fourth behavior of being "on location" occurred on 63% of the observations. When contracting was arranged during the second week for the 2 behaviors of being "on location" and "taking data," the "taking data" behavior increased to 51.5% from a baseline level of 10%. "Being on location" behavior increased slightly to 79.8% having been at the baseline level of 63.3%. The other 2 behaviors still averaged less than 10%. When contracting was arranged during the third week for all 4 behaviors, the "positive-interaction" behavior increased to a mean of 53% from its baseline level of 5.3%; the behavior of having "reinforcers present" increased to a mean of 57% from its baseline level of 1.7%. During the third week when all 4 behaviors were being reinforced, the average percentage exceeded 50% for the week for each behavior.



## DISCUSSION

The results showed that behavioral contracting was effective in improving performance. The baseline level of performance had been near zero for 3 of the 4 behaviors and at an intermediate level for the fourth behavior. When the first 2 behaviors were contracted, they increased while the other 2 remained near zero, indicating that the effect of the procedure was specific to the behaviors to which it was applied. When the contracting was later also applied to the other 2 behaviors, they in turn also increased such that all behaviors were then close to the level required for reinforcement. The experimental design precluded interpretation of the improvement as being attributable to the passage of time or a reactive effect of the recording procedure. These results replicate the positive effects observed in previous studies that used this same type of behavioral contracting with marital (Azrin et al., 1973), youth (Besalel & Azrin, 1981), and classroom (Besalel & Azrin, 1977) problems.

The principal value of behavioral contracting in employee motivation programs appears to be that it assures that the designated reinforcers will be desired by the employees, rather than the supervisor simply assuming that they will be. Similarly, the contracting helps assure that the standards of performance are accepted by the employee. A second value is that behavioral contracting structures the discussion and negotiation between the employee and supervisor according to definite guidelines that promote a positive and constructive approach toward arriving at a mutually acceptable agreement. The present positive results suggest that behavior contracting be used in employee-supervisor agreements as it has been in making agreements in the previous applications to the parent-youth, marital, and student-teacher relationships.

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