

BEHAVIORAL CONSULTATION IN A SECONDARY CLASS: USING DRL TO DECREASE NEGATIVE VERBAL INTERACTIONS

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Behavioral consultation is one of the most frequently practiced forms of consultation in school settings (Gutkin & Curtis, 1982). In reviewing the outcome consultation literature, Medway (1979) concluded that behavioral consultation has received the most empirical support, with the majority of studies yielding significant positive results on most of the dependent measures employed (e.g., behavior, attitudes, academic achievement, etc.).

While behavioral consultation has proven to be a particularly effective form of indirect psychological service, few studies have investigated its efficacy with secondary-age students (Kramer & Nagle, 1980). The majority of studies in the behavioral consultation literature have been conducted with younger children (Ajchenbaum & Reynolds, 1981; Bergan & Tombari, 1976; Gresham & Nagle, 1981; Nagle & Gresham, 1979).

The purpose of the current study was to evaluate the effectiveness of behavioral consultation with secondary-age students. Given the paucity of data regarding the outcomes of behavioral consultation with adolescent populations, this study seemed needed and justified. A brief review of the behavioral consultation model and the literature concerning differential reinforcement of low rates of behavior (DRL) is presented in the following sections.

Behavioral Consultation

Behavioral consultation is a problem-solving approach to intervention developed by Bergan and Tombari at the University of Arizona (Bergan, 1977; Bergan & Tombari, 1975, 1976; Tombari & Bergan, 1978). Behavioral consultation consists of four interrelated stages: a) Problem Identification, b) Problem Analysis, c) Plan Implementation, and d) Problem Evaluation. The consultant guides the consultee through these stages using three interviews: a) the Problem Identification Interview, b) the Problem Analysis Interview, and c) the Problem Evaluation Interview.

The most important skill behavioral consultants must possess to successfully conduct the aforementioned interview is to be able to use appropriate verbal behaviors to help focus on defining problem behaviors in operational terms, specifying environmental conditions surrounding these behaviors, and communicating details of intervention plans (Bergan, 1977; Bergan & Tombari, 1975).

Differential Reinforcement of Low Rates (DRL)

DRL involves the delivery of a reinforcer contingent upon either a reduction in the overall frequency of a response within a particular time period or an increase in the amount of time that elapses between responses (Bowser, 1981; Kazdin, 1980; Kramer & Rilling, 1970).

In school settings, DRL has been used to decrease a variety of behaviors such as talking out (Dietz, 1977), obscene language (Epstein, Repp, & Cullinan, 1978), aggressive behaviors (Dietz, Slack, Schwarzmuller, Wilander, Weatherly, & Hiliard, 1978), and inappropriate questioning (Dietz, 1977). A major advantage of DRL is that it is an effective alternative to punishment-based techniques for decreasing inappropriate behavior.

The present study applies a DRL procedure within the context of an interdependent group contingency (Litow & Pumroy, 1975) to decrease negative verbal interactions of adolescents in a resource room setting.

METHOD

Referral Problem

The resource room teacher in a multi-categorical classroom in a junior high school contacted the first author regarding behavior problems she was having in her classroom. The first author arranged an appointment with the teacher to discuss and define these problems via a Problem Identification Interview.

Problem Identification Interview (PII)

A PII was conducted with the resource teacher in order to: (a) specify the problem behavior(s), (b) identify the conditions including the eliciting and reinforcing events surrounding these behaviors, (c) obtain an estimate of the frequency and intensity of the problem behavior(s), and (d) devise a system for the teacher to collect baseline data on the problem behavior(s). The PII was tape recorded (with the teacher's permission) so that the consultant could review the tape in order to ensure accurate interpretation of the problem behaviors and conditions surrounding these behaviors.

The teacher was primarily concerned with the negative verbal behaviors of the three students present in her resource room during a particular period every day. Specifically, the teacher wanted to decrease the number of teasing and name-calling verbalizations emitted by these students. Examples of teasing and name-calling included: "You sure are stupid," "You're ugly," "Stupid," "Jerk," and so forth. Although the teacher wished to reduce teasing and name-calling she wanted to allow appropriate verbalization in class (i.e., questions and discussion between the three class members regarding work).

While the teacher could not specify the antecedent events that occurred just before the negative verbalization, she did indicate that teasing and name-calling were more frequent during independent work (e.g., writing reports) than during group instructional activities.

The teacher's typical response to the teasing and name-calling was to call attention to the behavior without raising her voice, tell the students that the behavior was inappropriate, and state that the behavior would not be tolerated. Further questioning by the consultant revealed that the teacher responded inconsistently to the students' teasing and name-calling. For example, the teacher would sometimes ignore one or two teasing remarks and intervene with a verbal reprimand on the third negative verbalization by a student or students. Other times, the teacher ignored all negative verbalizations. The teacher's inconsistent responses to negative verbalizations reinforced these behaviors on a variable ratio schedule, making extinction a difficult intervention strategy.

Teacher estimates of the frequency of teasing and name-calling were couched in terms of "bad days," and "good days." "Bad days" were operationally defined as 20 or more teasing and name-calling remarks in a 50-minute class period; "good days" were defined as 6 to 8 teasing and name-calling remarks during the same time period. The teacher estimated that the students had about two bad days per week.

The teacher agreed to collect baseline data on the number of teasing and name-calling remarks emitted by the three students during their 50-minute class period for six days. The frequency of these behaviors was recorded on a dated sheet of paper at the teacher's desk. Negative remarks were summed at the end of the class period after the students had left class, and recording sheets were placed in a file folder for safekeeping.

Problem Analysis Interview (PAI)

A PAI was conducted after the teacher had collected six days of baseline data. The data for the three students showed that the number of teasing/name-calling remarks ranged from 15 to 41 incidences in the 50-minute class period (range of .3 to .8 negative remarks per minute)

yielding an average of approximately 25 teasing/name-calling remarks per day ($\bar{X} = .5$ negative remarks per minute).

An attempt to identify the antecedent and situational conditions surrounding the problem behavior was undertaken in the PAI. The teacher indicated that one class member was usually the instigator of the negative verbal interchanges, and the other two students responded in a similar manner.

An intervention plan in which the class (three students) could earn reinforcement for low rates of teasing and name-calling behavior (DRL) was designed by the consultant and the teacher. The class could earn reinforcement if they emitted five or fewer teasing and name-calling responses in a 50-minute period (DRL₅). This intervention was based upon an interdependent group contingency (Gresham & Gresham, 1982; Litow & Pumroy, 1975); that is, reinforcement for each student depended on the behavior of the others. The teacher viewed the plan as workable and agreed to collect data on the students' behavior for the duration of the study.

Plan Implementation

The intervention plan consisted of the following procedures:

1. The teacher posted and discussed class rules, telling the group the maximum number of teasing/name-calling occurrences allowed to still obtain reinforcement for that day.
2. A mark was made on the blackboard for every teasing/name-calling verbalization. These verbalizations were not discussed or reprimanded; a mark was merely placed on the board.
3. Positive reinforcement was selected by each boy from a reinforcement menu mutually decided upon by the teacher and class members. The reinforcement menu for each day consisted of: (a) a hot drink (hot chocolate, tea, or coffee); (b) free reading; (c) listening to the radio.
4. In order to prevent the number of teasing remarks from getting out of hand if the students went beyond the limit set for the day (thereby losing that day's reinforcement), a larger reward was given at the end of the week if the group had 5 or fewer "extra" recorded teasing remarks for the week. The large reinforcer was 20 minutes of free time on Friday.
5. A line graph was posted so that class members could graphically see their progress. The extra teasing remarks (the number of remarks that exceeded the imposed limit) were recorded on a bar graph so the students could observe whether they would obtain free time at the end of the week.

The program worked so well the first week that a decision was made by the consultant and the teacher to decrease the allowed number of negative verbalizations from five to three with four (instead of five) extra negative verbalizations allowed in order to receive free time at the end of the second week. The teacher also felt that the students no longer needed the continual feedback of marking the number of negative verbalizations on the board. Instead, the teacher recorded the number of negative verbalizations in a notebook, and the students were told near the end of the class period whether they earned reinforcement.

RESULTS AND DISCUSSION

Problem Evaluation Interview (PEI)

The effectiveness of the plan was evaluated by using a decelerating changing-criterion single-case design with phases consisting of Baseline, DRL₅, and DRL₃ (Hartmann & Hall, 1976). As shown in Figure 1, the group's teasing and name-calling remarks decreased during the two intervention phases (i.e., DRL₅ and DRL₃). Inappropriate remarks decreased from a baseline average of 25.7 to 2.5 per day in the DRL₅ phase and 2.6 during the DRL₃ phase. The slight increase during the DRL₃ phase, though probably not significant, could be explained by the fact that the teacher withdrew visual feedback (i.e., board recording) on the frequency of negative remarks. During the DRL₅ plan, students never exceeded the daily limit of five

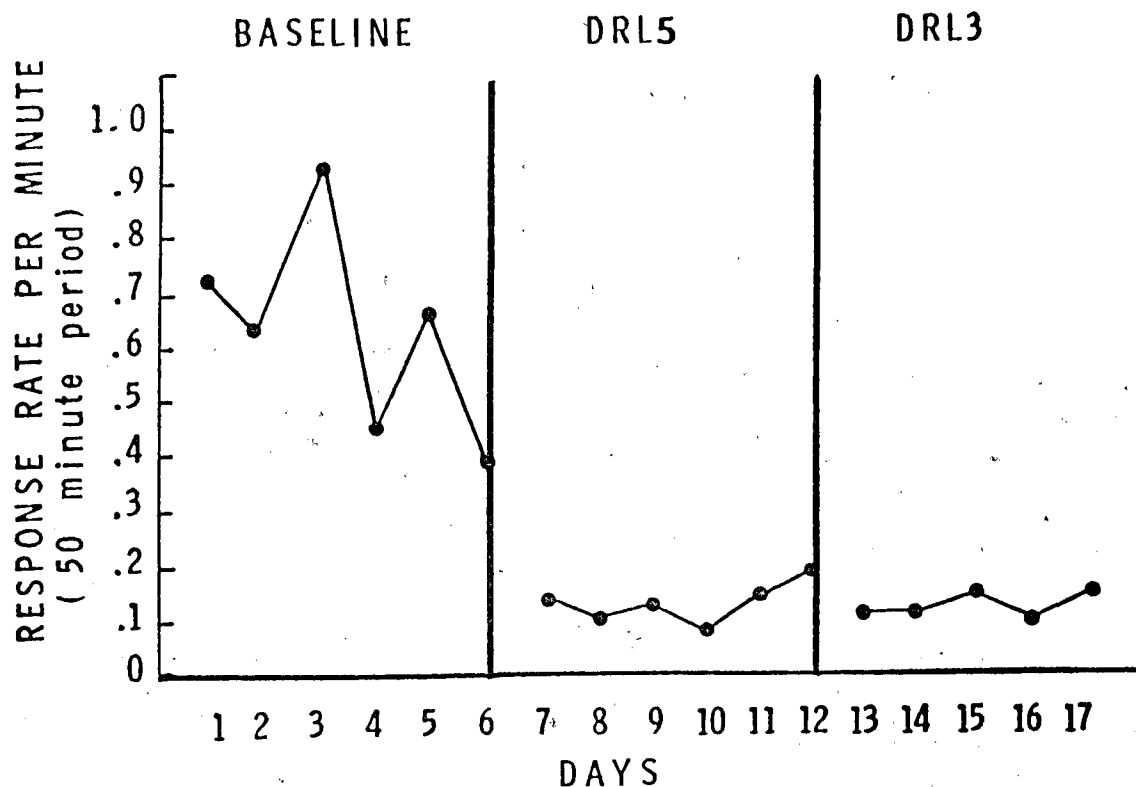


Figure 1

negative remarks. In the DRL₃ phase students exceeded (by one remark) the three negative remarks allowed on two of the six days. Table 1 presents means, ranges, standard deviations, and average negative remarks per minute across the three phases of the study.

TABLE 1

Means, Standard Deviations, Ranges, and Response Rates as a Function of Phase.

Phase	Mean	Standard Deviation	Range	Average Response Rate per Minute
Baseline	25.6	8.76	15-41	.51
DRL ₅	2.5	1.70	0-5	.05
DRL ₃	2.6	1.20	1-4	.05

During the PEI the teacher stated that the goal of the intervention plan was significant and had been achieved to her satisfaction, thus establishing the social validity of the intervention (Wolf, 1978). Furthermore, by having clear guidelines for inappropriate behaviors in the classroom, the teacher viewed the class as being run in a more consistent, fair, and structured manner. Anecdotally, the teacher related that the program also appeared to decrease movement in the classroom and increase cooperative behavior (generalization across behaviors), although no data were collected to substantiate this.

The intervention plan (i.e., DRL₃) was used the remainder of the school year with the teacher reporting continued success at year's end. This case study demonstrates the effec-

tiveness of behavioral consultation with a small group of adolescents and suggests the applicability of these techniques to older populations of school-age children and youth.

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