ABSTRACT

Thirty-six students at a continuation high school were identified as predelinquents and selected as subjects on the basis of their poor attendance and academic records. Pretreatment and posttreatment data were collected on the following variables: attendance figures and academic credits. Following preliminary assessment, the subjects were randomly assigned to one of three conditions: treatment by a behaviorally trained counselor, treatment by a generically trained counselor, or no treatment. Counselors were New Careerists who were divided into two matched groups. The groups received one month of either behavioral or generic counselor training. After a time-limited treatment period, the assessment procedure was readministered, so that the relative efficacy of the differentially trained counselors could be evaluated. Significant differences favoring the behaviorally trained counselors were found for both dependent variables. (Author)
A trend of the generic and no treatment groups were greater than for the behavioral and "good" attendance groups.

**Academic Behavior**

Academic achievement was examined by obtaining a difference score for each student. These scores were computed by subtracting the number of credits earned during the first semester from the number earned during the second semester, which was the semester during which the counseling took place. A simple randomized analysis of variance was carried out on the difference scores and a significant (p<.025) difference was obtained. To determine which groups differed significantly, multiple F tests were completed on the group means, which are shown in Table 1. The only significant difference showed the behaviorally treated group’s mean to be reliably higher than the no treatment mean, with the generically treated group’s mean falling between the two.

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<th>Table 1</th>
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**Discussion**

Data collected in this study show that non-professional mental health workers who received one month of intensive training show a more positive impact on the school-related behaviors of predelinquents when they are trained as behavioral, rather than generic counselors. It is also concluded that the behavioral counselors produced a significantly greater impact than did the no treatment condition.

These results indicate that when an experimental design is incorporated into a program evaluation study of differential training, a
Providing training for non-professionals is a subject which is widely discussed and debated, both in the literature and in less formal settings. Much of the discussion is focused on extolling the value of this or that given training package or procedure. In some respects, this paper will continue the discussion of training non-professionals one step further: it will compare outcome data when groups of non-professional mental workers receive two different training packages and then provide time-limited treatment to a specific client population.

The data reported here were collected during a special counseling project funded by the California State Department of Mental Hygiene and carried out in the Training Division of the Orange County Department of Mental Health. The Training Division is also involved in an ongoing New Careers program, and New Careerists who were employed as Mental Health Workers by the Department of Mental Health volunteered to receive one month of special intensive training. Following this intensive training, the New Careerists provided counseling to "prede-linquent" students at a continuation high school. Outcome was assessed after one semester of counseling.

METHOD

Thirty-six students at a continuation high school were selected as subjects on the basis of their poor attendance and academic records.
Data were collected on the following variables: attendance figures and academic credits. Following preliminary assessment, the subjects were randomly assigned to one of three conditions: treatment by a behaviorally trained counselor, treatment by a generically trained counselor, or no formal treatment. After a time-limited treatment period, the assessment procedure was readministered, so that the relative efficacy of the differentially trained counselors could be evaluated.

**Dependent Variables**

Attendance figures consisted of the number of periods a student was present during a given month long attendance period. The number of academic credits earned by each student was recorded for the semester during which treatment occurred.

**Counselors**

The six counselors were all New Careerists employed as Mental Health Workers by the Orange County Department of Mental Health. They were interviewed by two staff professionals and ordered into matched pairs on the basis of their "helping potential" as determined in the interviews. The workers in each pair were then randomly assigned to either the behavioral or generic training condition.

The behaviorally trained group consisted of one male Chicano, one Black female, and one Anglo female. A Black female and two Chicano males constituted the generically trained group.

**Subjects**

Thirty-six students from a local continuation high school were selected from a pool of fifty students who were judged by the attendance counselor to be having severe problems in both their attendance
and academic achievement, plus other difficulties. He predicted that a substantial number of the students would be dropped from school unless a marked change in their performance occurred. There were nineteen females and seventeen males. The mean age for the subjects was 16.4 years. They represented the most intractable attendance problems at the school, which had over three hundred and fifty students. The continuation school accepted students from other schools in the district which were unable to cope with a given students.

**Procedure**

Each group of counselor trainees received training from the Training Division, Orange County Department of Mental Health, for a period of one month. The training was forty hours per week. Two employees of the Department of Mental Health acted as trainers; each was a doctoral candidate in clinical psychology who had completed his course work and qualifying exams.

The behavioral training program consisted of several elements. Lecture-discussion of an elementary text in behavior modification (Berkowitz, 1972) was used, in addition to assigned readings (Krumboltz & Krumboltz, 1972; Tharp & Wetzel, 1969) and study objectives based upon the readings. The opportunity to observe models engaged in behavior modification techniques was made available by a field trip to a nearby day treatment center. Additional modeling was facilitated by showing the following films: Reinforcement Therapy, Teaching the Mentally Retarded-A Positive-Approach, and Who Did What To Whom? Each trainee also had a practicum project in which the trainee also had a practicum project in which the trainee would observe, record, and differentially consequence a selected target behavior emitted.
by the trainee's child or children. Examples of target behaviors were making the bed by a specific time in the morning, and cooperative play with siblings. The trainees also viewed and discussed a video tape presentation of contingency contracting.

The generic training program consisted of several modules which the Training Division had previously prepared. These modules, using the lecture-discussion framework, covered such areas as basic clinical skills, life cycles and coping mechanisms, the helping process, and disordered behavior. This training also included field trips to observe various social service agencies such as a state mental hospital, a county medical center, a social welfare office, and a minority group community resources center. Guest speakers from various departmental programs such as methadone maintenance, alcoholism services, children's services, and consultation and education were presented.

When the month of training was concluded, each New Careerist was assigned to a service delivery placement within the Orange County Department of Mental Health. As part of his assigned departmental duties, each worker was assigned a caseload of four of the multiproblem students from the continuation school. The worker was to spend no more than two-fifths of his time during the week in servicing this caseload. The workers received group supervision over their caseloads from the staff person who had originally provided training for that group.

Students were randomly assigned to workers within a given group: twelve to a behaviorally trained counselor, twelve to a generically trained counselor, and twelve received no treatment intervention from the project. A randomized blocking procedure using pre-treatment attendance scores was used, following the suggestion of Campbell and Stanley (1966). The students were assessed on the several variables
both before and at the conclusion of the treatment period which lasted approximately three and one half months.

RESULTS

Attendance Figures

To examine the attendance patterns of the various groups, data were collected at three points: the month preceding treatment and two months preceding termination of treatment. For purposes of attendance comparisons only, an additional "good" attender group of twelve students whose attendance was deemed satisfactory by teachers was included in the analysis.

A two-factor mixed design with repeated measures on one factor was used to test the null hypothesis. The first factor was treatment condition and the second factor, which was repeated three times, was treatment period (January, April, and May). This analysis produced a highly significantly overall during the three periods. This decline in attendance can be seen in Figure 1. Of greater interest is the finding that a highly significant (p<.001) interaction effect was obtained. This indicates that the rate of decline was significantly different for the various treatment groups.

To determine which rates of decline were significantly different, F tests for simple effects of periods-by-treatments interactions were computed. Comparing the rates for the behaviorally versus generically counselled groups produced a significant F indicating a clear difference. When the behaviorally treated group was compared with the non-treated group, a significant difference was found. However, when the behaviorally treated group was compared to the "good" attendance control group, no significant difference was found. Thus, the rates of
decline of the generic and no treatment groups were greater than for the behavioral and "good" attendance groups.

**Academic Behavior**

Academic achievement was examined by obtaining a difference score for each student. These scores were computed by subtracting the number of credits earned during the first semester from the number earned during the second semester, which was the semester during which the counseling took place. A simple randomized analysis of variance was carried out on the difference scores and a significant ($p<.025$) difference was obtained. To determine which groups differed significantly, multiple F tests were completed on the group means, which are shown in Table 1. The only significant difference showed the behaviorally treated group's mean to be reliably higher than the no treatment mean, with the generically treated group's mean falling between the two.

| Table 1 |

Discussion

Data collected in this study show that non-professional mental health workers who received one month of intensive training show a more positive impact on the school-related behaviors of predelinquents when they are trained as behavioral, rather than generic counselors. It is also concluded that the behavioral counselors produced a significantly greater impact than did the no treatment condition.

These results indicate that when an experimental design is incorporated into a program evaluation study of differential training, a
behavior modification approach has a more positive effect than a
generic counseling skills approach. This comparative data goes be-
yond the now well-established finding that non-professionals can be
trained to modify behavior in a variety of settings. It provides a
paradigm for evaluating a wide range of training procedures based on
various theoretical frameworks.

It is also worth noting that the relatively greater positive
effects shown by the behaviorally trained New Careerists can be inter-
preted as a preventative intervention. The students receiving behav-
ioral counseling attended and achieved better, and were, thus, less
likely to drop out or be dropped from school. Thus, they were also
less likely to show many of the anti- or a-social behaviors which
often accompany dropout status. Lee Robins has shown that adolescnets
who show observable anti-social behaviors are much more likely to sub-
sequently develop numerous other problems, including major mental ill-
ness, alcoholism, divorce, etc. The New Careerists, then, who receiv-
ed behavioral training not only showed a positive immediate effect, on
significant variables, but may have been preventing the development of
more serious problems in the future.
REFERENCES


Table 1
Mean Difference Scores of the Behavioral, Generic, and No Treatment Groups on Measures of Academic Achievement and Classroom Behavior

<table>
<thead>
<tr>
<th>Variable</th>
<th>Behavioral</th>
<th>Generic</th>
<th>No Treatment</th>
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</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credits Earned</td>
<td>7.7</td>
<td>4.5</td>
<td>-0.1</td>
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Figure 1. Changes in mean attendance levels for the groups in various conditions.

- o - generic group
- c - no treatment control group
- b - behavioral group
- a - "good" attendance group

Assessment Period

Pretreatment (January)

During treatment (April-May)

During treatment (May-June)