ABSTRACT
        Previous research has shown that certain counseling
methods, unlike behavioral counseling procedures, have been
unsuccessful in improving the sociometric status of unpopular and
uncooperative elementary students. This study attempted to assess the
effectiveness of behavioral counseling. Forty elementary students
were identified as unpopular and uncooperative. Twenty of them were
assigned to a control group while 20 others were assigned to four
groups of reinforcement counseling. The latter groups met twice a
week for five weeks, and the students were assisted to increase the
frequency of their rewarding and cooperative behavior while in the
presence of their peers. Following treatment, the sociometric
instrument was readministered to all students who were randomly
assigned to four groups of 10 Ss each. Each group participated in a
series of work tasks, and observations were made of the counseled and
control students' rewarding and cooperative behavior. Analysis of the
results revealed no significant differences between the control and
counseled groups on gain in sociometric choices or in their behavior
while participating in the series of work tasks. Reasons for the
failure of the behavioral procedure were attributed to problems in
reinforcing students who would not behave in rewarding or cooperative
ways toward their peers. (Author/SE)

THE EFFECTS OF A REINFORCEMENT-COUNSELING PROCEDURE
ON THE SOCIAL BEHAVIOR AND SOCIOMETRIC STATUS
OF ELEMENTARY STUDENTS

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Introduction

Descriptive studies of students having difficulty in inter-
personal relationships have indicated that in addition to having
academic problems, these students also hold negative attitudes towar?
school and toward themselves (Havighurst et al., 1962; Schmuck, 1963;
Glick, 1969). They are not liked by their peers and they do not exhibit
positive affect toward their peers (Bonney and Powell, 1953; Lippitt
and Gold, 1959). The long range outlook for these students seems
equally dim. In a nine-year study of low sociometric status students
Havighurst et al. (1962) concluded that low status students, in
comparison to their higher status peers, more frequently experience
failure in later school years and also in their work adjustment in the
community. In light of the above evidence, it would seem important for
school counsellors to promote good peer relationships among their
students.

Interpersonal relations have been studied extensively by social
psychologists. The concept of interpersonal attraction (Newcomb,
1958) and later, Exchange Theory (Thibaut and Kelly, 1959; Homans,
1961), has been forwarded to explain why some persons are successful

in forming good interpersonal relationships and others not. Persons who interact regularly and strongly with others are thought to have high levels of interpersonal attractiveness. That is, others are attracted to them. Exchange Theory predicts that when an individual interacts with others in such a way that other persons are rewarded in some way by the interaction, then that "rewarding" person will be sought out by others for more interaction. If, instead, a person incurrs significant costs to others in inter- personal interaction, Exchange Theory predicts that other persons will avoid interacting with that person who is acting to make interpersonal interactions unpleasant. The descriptions of low sociometric status students fit the individual who would make interpersonal interactions costly rather than rewarding. As Bonney (1947) has described them:

> (Unpopular children) are lacking in an attitude of good will toward others; instead of praising others and of being glad because of their successes and their happi- ness, the unpopular children are more likely to show jealousy and resentment. None of the socially unsuccess- ful children has ever been observed in the school situ- ation to perform a genuinely unselfish act (p.73).

The implication for elementary school counselors wishing to assist low status students is that a method is needed to teach these students to behave in rewarding (as opposed to punishing) ways toward their peers.

Several counseling outcome studies have provided some in- direct evidence in support of this point of view. Client-centered and Developmental Counseling approaches that focused on the self- exploration of a S's feelings almost without exception were

unsuccessful in demonstrating changes in interpersonal relation-
ships (Kranzler, 1968; Lewis, 1970). Behavioral approaches have
been somewhat more successful-focusing on the development of
students' ability to behave socially (Hansen, Niland and Zani,
1969; Barrick et al., 1971). However, these studies have not
determined what changes actually occur in Ss' social behavior as
a result of counseling.

Since Exchange Theory and related basic research suggests that
interpersonal attractiveness is functionally related to the exhibit-
ion of cooperative and other rewarding behavior, this study was con-
ducted to determine if a Behavioral counseling procedure was effect-
ive in teaching low status elementary students to behave in cooper-
ative and rewarding ways, and thus also to increase the students'
interpersonal attractiveness. Specifically, this study was con-
ducted to answer these questions:

(1) Are Behavioral counseling procedures effective in
teaching unpopular students to exhibit rewarding
and cooperative behavior?

(2) Are Behavioral counseling procedures effective in
increasing the interpersonal attractiveness of
unpopular students?

(3) Are the expressions of students' rewarding and
cooperative behavior following counseling correl-
ated with changes in their interpersonal
attractiveness:

Criterion Measures

Sociometric choices were chosen as a measure of Ss' inter-
personal atractiveness. A sociometric instrument allowing students
to choose an unlimited number of classmates with whom they would

like to sit, work, or play, was used.

Students' choices for work and playmates on a sociometric instrument correlated significantly (.76 and .80) with their actual choices for companions in work and play situations (Byrd, 1951). Students' sociometric status has also correlated significantly (.60) with teachers' ratings of students' social acceptance in the classroom (Gronlund, 1951).

The reliability of a sociometric instrument allowing unlimited choices was .89 over a two month period (Byrd, 1951). However, in the present study, the reliability of the sociometric instrument over a two month period was found to be much lower, ranging from .55 to .64, with an average of .61 over four classrooms.

To determine if Ss learned to exhibit cooperative and other rewarding behavior toward their peers, groups of both counseled and uncounseled Ss were observed while they participated on a series of three performance tasks. These included sorting a variety of nuts into separate containers, assembling a puzzle, and creating a structure out of construction blocks. A behavior rating scale, based on earlier scales by Bonney and Powell (1953) and Patterson et al. (1969), was developed by the author to rate the rewarding, cooperative and non-conforming behavior of the Ss. Their behavior was rated in ten-second intervals by two adult observers.

The observation procedure was first tested on seven groups of students, judged by their teachers to be either cooperative or uncooperative students. The reliability of observations between observers was calculated using a per cent method (Patterson et al., 1969) which revealed the per centage agreement in observation by

the observers. Mean per centage agreement between 2 adult observers for observations of all $\underline{Ss}$ in this study equalled 92%.

Method

Pre-testing

A sociometric instrument described above was administered by the teachers of three third-fourth grade classrooms and one fifth grade classroom, all from one elementary school. Each teacher read identical instructions to their students. On the bottom of the sociometric form the students indicated if they wished to get along better with their classmates.

Sample

From 49 $\underline{Ss}$ sociometrically-ranked in the lower half of their respective classes and who indicated a desire to get along better with their classmates, 20 $\underline{Ss}$ were randomly assigned to an Inactive Control condition; another 20 $\underline{Ss}$ were randomly assigned to a Reinforcement-counseling condition - 5 $\underline{Ss}$ to each of four counseling groups.

Counselors

Two Reinforcement-counseling groups were led by an elementary school counselor in the Eugene 4J School District and two groups were led by a doctoral student in Counseling at the University of Oregon. Both counselors had previous experience working with elementary students.

Reinforcement-counseling Condition

A ten-unit curriculum, developed by the authors, was designed to teach Ss to exhibit cooperative and ·erbally-rewarding behavior toward their peers. Each counselor met twice weekly for 5 weeks outside of the classroom with two groups of Ss. Topics and group tasks were introduced by the counselors to facilitate spontaneous interaction among the Ss. Counselors modelled cooperative behavior and verbally-reinforced Ss for behaving in rewarding and cooperative manners.

Inactive Control Condition

Ss in this condition received no treatment nor were they told of their assignment as control Ss.

Post-testing

Immediately following the completion of the Reinforcement-counseling curriculum, the sociometric instrument was re-administered to the four classrooms whose students participated in the study. Then all Ss were randomly re-assigned into ten groups of four. Each group was then observed separately while they participated on three performance tasks (described above).

Analyses and Results

Complete sociometric data were collected on 40 Ss. Observation data were collected on only 39 Ss because one S was absent from school the week observations were made.

The questions posed in this study were tested in null hypothesis form, with $\alpha = .05$. Each will be considered in turn.

Hypothesis -- One: "There is no difference in the frequency of coded rewarding behavior, cooperative behavior, non-conforming behavior, or total behavior coded between Reinforcement-counselling and Inactive Control groups during their participation in performance tasks."

Differences in the social behavior of Reinforcement-counseling and Inactive Control groups were analyzed using a two-tailed t-test (Hays, 1963). Table 1 presents for each of two treatment conditions, the number of Ss, sums, means, standard deviations, and Student's t values on behavior coded during the performance tasks.

Since none of the t values reached the required level of significance, it was concluded that the social behavior of Reinforcement-counseling Ss did not differ significantly from Inactive Control Ss, when they participated in the performance tasks.

Hypothesis - Two: "There are no differences in gains in sociometric choices between Reinforcement-counseling and Inactive Control groups."

Differences between Reinforcement-counseling and Inactive Control groups on gains in sociometric choices were analyzed using an Analysis of Covariance (Guenther, 1964), with pre-test choices as the co-variate. Table 2 presents the number of Ss, sums and means of pre-test and post-test sociometric choices for each group.

Table 3 presents the summary values for the analysis of covariance
and the F ratio of the difference in pre-test and post-test socio-
metric choices for the two treatment conditions. The F ratio was
not significant, indicating that there were no significant differ-
ences between treatment groups on gain in sociometric status.

Hypothesis - Three: "There is no relationship between gains in
sociometric choices and frequency of behavior coded during the
performance tasks."

The coded social behavior of all $\underline{Ss}$ was correlated with their
gain in sociometric choices using a Pearson product-moment correl-
ation technique (Hays, 1963). Table 4 presents the Pearson product-
moment correlation coefficients for ten comparisons. Only one value
reached the required level of significance, and this probably the
result of chance factors. These results indicated there was no
significant relationship between $\underline{Ss}$' gain in sociometric choices
and the frequency of their social behavior.

Summary and Conclusions

The purpose of this study was to determine if a Behavioral
counseling procedure was effective in promoting the interpersonal
attraction of low status pupils by teaching them to behave in
socially rewarding ways toward their peers. Analysis of the social
behavior and gains in sociometric choices of Reinforcement- coun-
seling and Inactive Control groups revealed no significant differ-
ences between them.[1] These results indicate the counseling pro-
cedure used in this study was not effective in promoting low status

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[1]No significant differences across counselor conditions were found
on gains in sociometric choices or social behavior.

students to behave in rewarding ways toward their peers.

The author concluded that the procedure was ineffective because of the difficulties experienced by the counselors in reinforcing Ss. Counselors found it difficult and tiring to reinforce an S for each and every instance of appropriate social behavior noted of an S. Although similar verbal reinforcements were offered to Ss, the Ss sometimes responded positively to reinforcement, other times they seemed not to notice counselor praise. Ss who would not or could not model an appropriate social behavior posed another problem. Reinforcement was to be given to Ss behaving in socially rewarding ways but if they did not behave appropriately, verbal reinforcement was not given. The type of group task assigned to the counseling groups also affected the Ss behavior. Sit-down activities requiring individual effort were judged by the counselors to produce more co-operative and rewarding behavior regardless of the amount of counselor reinforcement given. Tasks requiring group coordination were much more difficult for the Ss and at times they argued heatedly among themselves.

The test of the relationship between Ss' social behavior and changes in their interpersonal attraction hinged on the success of the counseling procedure. Since the Reinforcement-counseling and Inactive Control groups did not differ in social behavior nor in gains in sociometric choices, the non-significant correlations between social behavior and sociometric choices may have arisen from

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[1]No significant differences across counselor conditions were found on gains in sociometric choices or social behavior.

chance fluctuations in either the Ss' rated social behavior or in their sociometric choices. The low stability recorded in the sociometric ratings (average of .61 over four classrooms) would support this interpretation regarding sociometric choices. Additional data was not available to test the reliability of the ratings of Ss social behavior.

The results of this study might be used to infer that structured counseling activities outside the classroom are not effective. If such activities were carried on in the classroom, the peers of low status Ss could see that their unpopular classmates were trying to behave regularly in more rewarding ways. These higher status students might then take a renewed interest in the low status Ss and participate with them in a variety of additional social activities. The combination of in-class social skill development and the renewed interest of high status students in their lower status peers could bring marked improvements in the interpersonal relationships of many elementary school students.

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