

To the Graduate Council:

I am submitting herewith a dissertation written by Terry W. Alderman entitled "The Relationship Between Affective Teacher Behavior and Teacher Ability to Modify the Behavior of Students Through the Use of Approval." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Psychology and Guidance.

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THE RELATIONSHIP BETWEEN AFFECTIVE TEACHER BEHAVIOR
AND TEACHER ABILITY TO MODIFY THE BEHAVIOR
OF STUDENTS THROUGH THE USE OF APPROVAL

A Dissertation
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ABSTRACT

Purpose

The major purpose of this study was to investigate the relationship between affective teacher behavior and teacher ability to modify the behavior of students through the use of teacher approval.

Method

Twelve teachers, randomly selected from a group of 21 middle school teachers in an urban school district in South Carolina, participated in the study. Teachers identified two target students from among their morning classes. Teachers were requested to consider only those students who displayed an excessive amount of inappropriate behavior as possible target students. Target behaviors included: getting out of one's seat without permission, excessive talking, inattentive behavior, task relevant behavior, appropriate socializing, etc. Baseline data were collected for a period of two weeks on student and teacher behavior. Teacher behaviors which were monitored included: approvals (verbal and nonverbal), approvals of target students, disapprovals of target students, instruction, performing routine tasks, and socializing.

Teachers' affective levels were determined from target students' ratings of a series of videotaped simulated episodes of teacher-student interactions which depicted different degrees of teacher approval and teacher empathy. Target students rated each scene in terms of how much their teacher was like the teacher in each of the videotaped excerpts.

Teachers received a classification of high, middle, or low depending on the extent to which they responded empathically and approvingly to target students.

Teachers then received two hours of training in the principles of reinforcement with emphasis on social praise and the value of teacher approval. Training components included small group discussions and discussion of selected portions of a teacher handbook of instructional techniques prepared by the Experimenter. During treatment, teachers were required to praise target students five times daily during the 25 minute experimental session. Attentiveness, study skills, and social behaviors were the focus of most teacher praise.

Treatment data were collected for five weeks. An affective post-test was administered to all target students at the conclusion of the experiment to determine if students detected a change in teacher behavior during treatment. Post-test scores were compared to pre-test averages.

Results

Teachers who were rated low on the scale of affective functioning were equally effective and, in some cases, slightly more effective in modifying student behavior through the use of teacher approval than teachers who were rated high. Target students of teachers who were rated lowest on the affective scale detected a change in teacher behavior during treatment to a greater degree than students of teachers who were classified in the Middle and High affective categories.

Conclusions

Student behavior can be modified through the use of teacher approval. A teacher's level of affective functioning, however, may not be an important determinant of the effectiveness of teacher approval in improving student behavior. Behavior modification strategies, therefore, can be applied effectively by teachers with varying levels of affective skill. The affective assessment technique used in this study, however, has not been validated. This may be a major weakness of the study. More definitive research of the possible relationships between affective teacher behavior, teacher praise, and student affect is needed.

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CHAPTER I

INTRODUCTION

Numerous studies have provided convincing evidence that teacher approval is a valuable classroom consequence. The amenability of academic, social, and creative behaviors to teacher approval further enhances its value as an effective classroom tool (Kennedy and Wilcutt, 1964). Social behavior appears, however to be most amenable to change through the contingent application of teacher approval. Madsen, Becker, and Thomas (1968) systematically varied the behavioral responses of two elementary school teachers to the inappropriate social behavior of three elementary school children and concluded that teacher approval of appropriate student behavior is probably the key to effective classroom management. Similar findings have been reported by Becker, Madsen, Arnold, and Thomas (1967); McAllister, Stachowiak, Baer, and Conderman (1969).

Research by Cormier (1970) revealed that students who were recipients of teacher praise help promote good student-teacher relations. Improvement in teacher-student relations was also a finding in research conducted by the Center at Oregon for Research in the Behavioral Education of the Handicapped. This office developed "Contingencies for Learning Academic and Social Skills," (CLASS), a program designed to change disruptive students' negative behavior through teacher training in the use of praise for appropriate behavior and withholding all reward for negative behavior by referring students to a time-out room. After a 30-45 day application of treatment to 32 acting-out children enrolled in

24 regular primary classroom settings during the 1971-72 school year, results revealed significant changes in the appropriate behavior rates of children to whom it was applied and in the attitudes of teachers toward students in the study, the acting-out child being seen as a child needing special help in adjusting to others instead of a deviant troublemaker.

Although the efficacy of teacher approval in shaping behavior is well documented, there have been few research attempts to investigate the relationship between variations in teacher behavior and the effectiveness of praise. Researchers in this area have been chiefly concerned with subject and reward variables: subject intelligence differences (Tiber and Kennedy, 1964), differences between concrete and abstract rewards (Fisher, 1961-62), the relative effectiveness of stress and praise (Metz, 1961-62), relative effectiveness of praise and blame as a function of subjects' intelligence (Kennedy, Turner, and Lindner, 1962), the value of praise versus reproof relative to the preceding incentive conditions (Stevenson and Snyder, 1960), the effectiveness of praise versus blame relative to the variables of subjects' grade levels, intelligence, sex, race, social class, and school (Kennedy and Wilcutt, 1963), and the comparative effectiveness of direct versus indirect teacher attention (Geotz, Thompson, and Etzel, 1975).

Research which examines specific teacher personality characteristics relative to the effectiveness of teacher approval is limited. Apparently, most research efforts in this area are based on the assumption that regardless of variations in teacher personalities, change in specific teacher behaviors can produce desired changes in student behavior. Although this assumption has some supporting evidence

(Becker, Madsen, Arnold, and Thomas, 1967), it would appear that, if a relationship can be found between certain teacher personality variables and teacher ability to modify student behavior through approval, the problem of identifying which teachers could benefit most from training in the use of contingent approval would be partially resolved.

Affective Behavior and Teacher Effectiveness

It is probable that a large number of teacher personality variables is responsible for variations in student response to teacher approval; however, empathy, the ability to accurately perceive the feelings of the learner, has been identified as one of the chief characteristics of successful teachers (Carkhuff, 1971, p. 164; Dixon and Morse, 1961, p. 323; Melton, 1965, p. 927; and Rogers, 1961, p. 287).

Teachers' academic achievement in college, years of teaching experience, and mastery of the subject matter appear to be largely unrelated to teacher effectiveness in the classroom. A plethora of empirical studies indicate that while cognitive understanding and sufficient training in subject matter are important, the teacher's personality and the extent to which he/she is affectively skilled, i.e., is perceived as a trusting, understanding, and genuine person are of far greater importance (Alshuler and Ivey, 1973; Aspy, 1969; Costin and Grush, 1973; Gazda, 1973). Gazda (1973), in a comprehensive review of research findings in the area of affective education, reported that teacher behavior is the most important determinant of the quality of emotionality in the classroom. Heitzman and Starpoli (1975) dispute the claims of some educators that characteristics of successful teachers cannot be identified by citing research efforts

which have found two traits common among successful teachers--warmth and flexibility.

There is also evidence to suggest that teachers recognize the value of skills acquired through affective training programs more than those acquired through other types of training (Gazda, 1973). At the conclusion of different types of training an overwhelming majority of both elementary and secondary teachers rated the affective training components as most helpful. There may be some relationship between these findings and those of Dickens and Fox (1973) in which a definite relationship was reported between the perceptions teachers have of themselves and their patterns of interaction in the classroom. Teachers with good self-concepts consistently responded at higher levels than teachers who rated themselves lower. These results seem especially credible since a major focus of affective training entails self-examination, analysis of one's manner of responding to others, and improved self-confidence in relating to others.

Student Response to Affective Models

Recent studies (Aspy, 1972; Berenson, 1971; Hefele, 1971) indicate that the students of teachers who have received affective training attain significantly higher levels of performance, motivation, and achievement. In one study (Aspy, 1972) 25 students were randomly selected from among their classes and were administered the Stanford Binet Intelligence Test. Administration of the same test after affective teacher training revealed a difference of 9 points; an increase which was found to be statistically significant.

Using a newly developed scale, based on the Carkhuff scale for the measurement of a teacher's understanding of the meaning of classroom experiences for students, Aspy and Rcebuck (1975) found that "High Meaning" teachers--those with highly developed affective skills and who used praise, encouragement, accepted student feelings and avoided criticisms--elicited more student initiated talk and had fewer instances of silence or confusion during instructional situations. Their data indicated that "High Meaning" teachers used fewer controlling or directed behaviors and elicited more total student response.

There is no conclusive evidence that the approval of teachers, who respond at high levels of communication according to Carkhuff's level of facilitative functioning (Carkhuff, 1969, p. 115), is a more potent reinforcer than the approval of teachers who respond at lower levels; however, research on the responsivity of individuals to variations in affective behavior adds some support to this contention (Bugental and Love, 1975; and NuHall and NuHall, 1976). The theory that self-esteem is acquired through the approval of "significant others" also supports this belief if the assumption that teachers who respond at higher levels are more likely to be regarded as "significant others" by students is accepted (Franks and Marolla, 1976).

Carkhuff (1971, p. 164) suggests that one of the greatest contributions which education has to offer is "its rationale and research tools for discovering an understanding of all effective human relationships in which one individual helps another to higher levels of functioning." In reference to parent-child relationships, teacher-student relationships and counselor-counselee relationships, Carkhuff asserts that the relationship between the helper and the

helpee is the critical determinant in learning experiences. Carkhuff alludes to the importance of teacher empathy and its effect on the reinforcement value of a teacher's approval in suggesting that the conditions of a relationship enable the helper to understand the helpee, and the helper to establish himself/herself as an important influence or potent reinforcer of the helpee's behavior. According to Carkhuff, the relationship between persons involved in a helping situation can be operationalized in terms of the level of communication of certain conditions between the helper and the helpee. These conditions and the level of communication rating scales devised by Carkhuff were used as the basis for formulating and classifying teacher-student interactions cited later in this study.

If teacher empathy is related to the potency of a teacher's reinforcement value, specifically the value of his/her approval, it would appear that a research project designed to help clarify this relationship would contribute to a more complete understanding of student response to teacher approval.

Statement of the Problem

The present study seeks to determine if teacher ability to modify the behavior of students through approval varies in relation to student perception of a teacher's affective skill. The study is based on the premise that students can make accurate judgments of teachers' affective behavior sufficient for the purposes of this experiment.

CHAPTER II

METHOD

Subjects and Setting

Student subjects were drawn from a middle school in a metropolitan area in South Carolina. There were approximately 1050 students enrolled during the time of the experiment. Approximately 36 percent of the student body was non-white. Whites and non-whites were represented in the study. The community from which the school population was derived represents the complete range of socio-economic levels from lower to upper class. The research was conducted during the fall of 1977.

Twelve teacher subjects were randomly selected from a group of 21 classroom teachers representing sixth, seventh, and eighth grades. Teachers from all three grade levels were included in the study. Twenty-four student subjects were selected for participation in the experiment as target students. To reduce research variables only male students participated. Teachers made selections from among their morning classes of two male students who attended school regularly and displayed an excessive amount of inappropriate classroom behavior. Only teachers and students involved in strictly academic classes participated in the experiment, i.e., physical education, music, and art teachers did not participate.

Observation Procedures

Observers from a large high school adjacent to the middle school monitored student and teacher behavior during baseline and treatment

periods. All observers were either juniors or seniors. Two observers were assigned to each class and trained to collect data on either student or teacher behavior. Teachers were informed that they would not be fully apprised of all experimental procedures until the conclusion of the research. All teachers agreed to participate under this condition. Teachers were unaware that their behavior was being monitored. At the conclusion of the experiment teachers and students were informed of the observations which had been made and other facets of the experiment. Target student and teacher behavior was monitored 25 minutes per day, Monday through Friday of each week, for two weeks during baseline and five weeks during treatment. Using the ten-second time interval assessment approach, observers recorded the behavior of target students on the count. Observations of teacher behaviors that occurred during each ten-second interval were recorded at the end of the interval.

Observers were trained in the use of the observational techniques and behavior categories by the experimenter. Two one-hour training sessions were held during which behavior rating scales were discussed and oral examples of student and teacher behavior were rated. Observers then rated a ten minute videotape of a simulated classroom situation depicting various student and teacher behaviors. Observer ratings were compared with ratings made by the experimenter. A minimum interrater reliability score of .85 was required of all observers. Reliability scores were computed by dividing the total number of agreements by the total number of observations. A reliability check was made during the third week of data collection. Reliability ranged from .85 to .98 with a mean for all observers of .91 (Appendix B, Table 6).

Rating Student Behavior

Student behavior was rated according to a modified version of the "Behavior Rating System" developed by Williams and Anadam (1973). Four major categories of behavior were monitored: task relevant, which included any behavior that involved participation in the assigned lesson activity; task irrelevant, which included any behavior which was not in compliance with the teacher's requests at the time but which did not distract other students; appropriate social interaction, which included social interaction, which was approved by the teacher; and disruptive behavior, which included any behavior that interfered with the academic performance of another student. The disruptive behavior category was inclusive of motor behaviors and aggressive behavior. See Appendix B, Behavior Rating Scale.

Rating Teacher Behavior

The following behavior categories were used in monitoring teacher behavior: approval, which included verbal and non-verbal approval of any student for any behavior; target approval, which included any behavior related to instruction such as writing on the board, discussing, lecturing, listening; neutral attention to appropriate behavior, which included observing students working, walking in an area where students were working without giving specific approval or attention to any student; disapproval, which included any negative expression directed to a student; routine tasks, which included making announcements, taking up money, etc.; and socializing, which included any kind of interaction between student and teacher which was not related to academic issues. See Appendix B, Teacher Behavior Rating Scale.

Teacher Affective Measure

Judgments regarding the affective behavior of each teacher subject were based on student ratings of a video tape which presented simulated classroom situations depicting teacher-student interactions. Target students and students in the class of the target students rated 24 video-taped simulated episodes of teacher-student interaction. Twelve of the 24 video taped episodes depicted teachers who approved students, listened attentively, and, in general, responded positively to students. Twelve of the episodes depicted teachers who were critical of students, inattentive, and, in general, negative in their responses to students. The episodes were formulated by the E with input from a student advisory group. The basis for formulation and classification of the episodes was Carkhuff's rating scale of facilitative interpersonal functioning. See Appendix A, Gross Ratings of Facilitative Interpersonal Functioning. Episodes which were judged by the E to be below level 3 on the Carkhuff scale were classified as low-empathy items. Episodes which were judged by the E to be level 3 or above were classified as high-empathy items. For further refinement, the episodes were presented to over 100 students in another middle school to identify and delete ambiguous episodes and to verify their classification as either high or low empathy items. See Appendix A, stimulus situations.

Students were asked to assign a rating of 1 to 10 to each episode. A rating of 10 would indicate that the teacher in the simulated episode was "exactly" like the rater's teacher. A rating of 5 would indicate that the teacher in that particular simulated episode was "somewhat" like the rater's teacher. A rating of 1 would suggest

that the teacher in that particular episode was not at all like the rater's teacher. All ratings were obtained in the absence of Teacher S's. Students were informed that their individual ratings would be confidential. No student signatures were required on the rating sheets. Students recorded only their book numbers. The E used the book numbers to identify the ratings of the target students during pre and post affective assessments. Although ratings of the entire class of each Teacher S were obtained, only the target students' ratings were used in determining a teacher's affective score. The ratings of other class members were compared to the ratings of target students. There was general agreement between the ratings of the target students and the ratings of the other class members.

Teacher affective scores were computed by obtaining the sum of each target student's ratings for the 12 high-empathy items and subtracting the sum of the target student's ratings for the 12 low-empathy items. After results from both target students were obtained, the results were totaled to determine a teacher's final affective score. For example, if the sum of Target Student A's high-empathy ratings was 90 and the sum of his low-empathy ratings was 22, Target Student A's affective rating of the teacher S would be 68. If the sum of Target Student B's high-empathy ratings was 65 and the sum of his low-empathy ratings was 35, Target Student B's affective rating of the teacher S would be 30. The teacher's affective score would be 98, the sum of 68 and 30.

Teachers and their target students were placed in either high, middle, or low categories, depending on the affective score of the teacher. Teachers classified as high received composite scores above

plus 90. Middle scores were considered to be between plus 20 and plus 89 while low scores were those of minus 1 or below. Scores ranged from plus 116 to minus 87. Four teachers were classified as high, four as middle, and four as low. Pretest scores of teachers in each category are presented in Table 1. This particular technique of measuring a teacher's affective behavior was developed for this study and has not been employed with a sample of students large enough to establish more specific score requirements for each of the categories; therefore, establishing the score requirements for each category was somewhat arbitrary. The E chose those intervals which seemed to suggest that there was a relatively clear distinction between groups of scores.

Data are presented as separate groups within one of three affective categories--high, middle or low. Data from each teacher and accompanying target students constitute a separate group. Results are presented, therefore, in three categories and 11 groups with the order of presentation being determined by a teacher's affective score. For example, the teacher obtaining the highest affective score and the accompanying target students form Group 1 within the High Category, the teacher obtaining the second highest affective score and accompanying target students form Group 2 within the High Category, and the teacher obtaining the third highest affective score and accompanying target students constitute Group 3 within the High Category, etc. (see Table 1.)

An affective post-test was administered to all target students at the conclusion of the experiment to determine if students detected the change in teacher behavior. Post-test scores for each group and each category were compared to pre-test averages.

TABLE 1
TEACHER AFFECTIVE SCORES, PRE-TEST

Group	Teacher	Category	Score
1	A	High	116
2	B	High	113
3	C	High	107
4	D	High	93
5	E	Middle	72
6	F	Middle	48
7	G	Middle	37
8	H	Middle	21
9	I	Low	-16
10	J	Low	-46
11	K	Low	-87
*12			

*Data deleted. Teacher consistently failed to comply with research guidelines.

Experimental Procedures

This study, described as an AB design, involved inter-group comparisons among three groups of experimental subjects. In an effort to control for extraneous variables all experimental procedures involving data collection were made Monday through Friday of each week. Experimental conditions consisted of a two week baseline period followed by a five week treatment period. Teacher affective assessments were obtained in advance of baseline and at the conclusion of the experiment. Teacher training sessions were conducted in advance of treatment. All student participants were males. All teacher participants were females.

Teacher Training

Teachers were trained in the fundamentals of reinforcement theory by the experimenter. Training components included small group discussions, discussion of selected portions of a Teacher Handbook of Instructional Techniques prepared by the experimenter, and individual instruction. The principles of reinforcement theory and their effect on behavior were presented in relation to teacher response patterns. The major focus of all training sessions was the value of teacher approval, alternative means of applying teacher approval, and the importance of consistent teacher behavior in responding affirmatively to appropriate student behavior. The major premise underlying teacher training was similar to that offered by Ralph Mager: Realizing the existence of certain behavioral principles, we should allow them to work for, rather than against us.

Study components were presented in the following sequence:

- (1) Introduction to behaviorism.
- (2) Discussion of the principles of reinforcement; positive reinforcement, negative reinforcement, extinction, successive approximations.
- (3) The Premack Principle, the value of teacher approval, alternative ways of administering approval, and individual discussion of strategies for maximizing a teacher's reinforcement potential.

Treatment Implementation

The temporal arrangement of this study allowed observers to collect baseline data on student subjects in advance of teacher training sessions. Following baseline, the E examined the rates of teacher target approvals and presented proposed rates of teacher approvals during treatment to teacher subjects. Teachers agreed to attempt to praise each target student a minimum of five times each day above their baseline average. The Experimenter presented teachers with written instructions delineating their tasks during the treatment period. Attentiveness, study skills, and social behaviors were the focus of most teacher praise. Teachers were also asked to ignore inappropriate behavior if possible. See Appendix B.

CHAPTER III

RESULTS

Results of teacher behaviors, during baseline and treatment conditions, are reported as frequency counts of teacher approvals and teacher disapprovals of target students. Although the latter measure provides some pertinent information, the most significant measure of teacher behavior is the frequency of target student approvals. In addition to frequency counts, means of observations during baseline and treatment conditions are presented for comparison purposes. Student behavior results are reported as percentages of appropriate behavior.

Differences among the three categories, in terms of changes in appropriate student behavior, were small. The High Category evidenced the smallest improvement in appropriate student behavior, with an increase of 14 percent. The Middle and Low Categories experienced increases of 16 and 17 percent, respectively. Students' baseline scores were excellent predictors of the extent to which they improved during treatment. In general, students who obtained the higher baseline averages evidenced smaller improvements during treatment. Teachers in the High Category exhibited the greatest increase in the number of target approvals during treatment, followed by the Middle Category. Target students rated the teachers in the High Category slightly lower on the affective post-test compared to their pre-test ratings. Target students of teachers in the Middle and High Categories rated their teachers higher on the affective post-test.

High Category

Group 1. Frequencies of selected teacher behaviors from Group 1 are presented in Figure 1. The frequency of teacher approvals averaged 1.25 per day during baseline. The mean number of target approvals during treatment was 5.17, an increase of 3.92. The highest number of recorded target approvals was 3 during baseline and 10 during treatment. The number of target disapprovals averaged 1.25 during baseline and .52 during treatment, a decrease of .73. Target student B moved during the treatment phase; therefore, the mean number of target approvals is somewhat low compared to other teachers in the High Category.

Results of target student behaviors from Group 1 are presented in Figure 2. The mean percentage of appropriate behavior for Student A during baseline was 68. The mean percentage of appropriate behavior for the same student during treatment was 94, an increase of 26 percent in appropriate behavior. Student B moved during the treatment phase of the research; therefore, only one set of student data is presented for Group 1.

The highest affective rating of all teacher participants on the pre-test was obtained by the teacher of Group 1. The affective pre-test scores were 55 and 61 for Students A and E respectively. As previously indicated, Student B moved during the research; therefore, only Student A's post-test score is available. The post-test affective score of Student A was 32, a decrease of 29.

Group 2. Figure 3 presents a graphic description of selected teacher behavior from Group 2. The frequency of target approvals

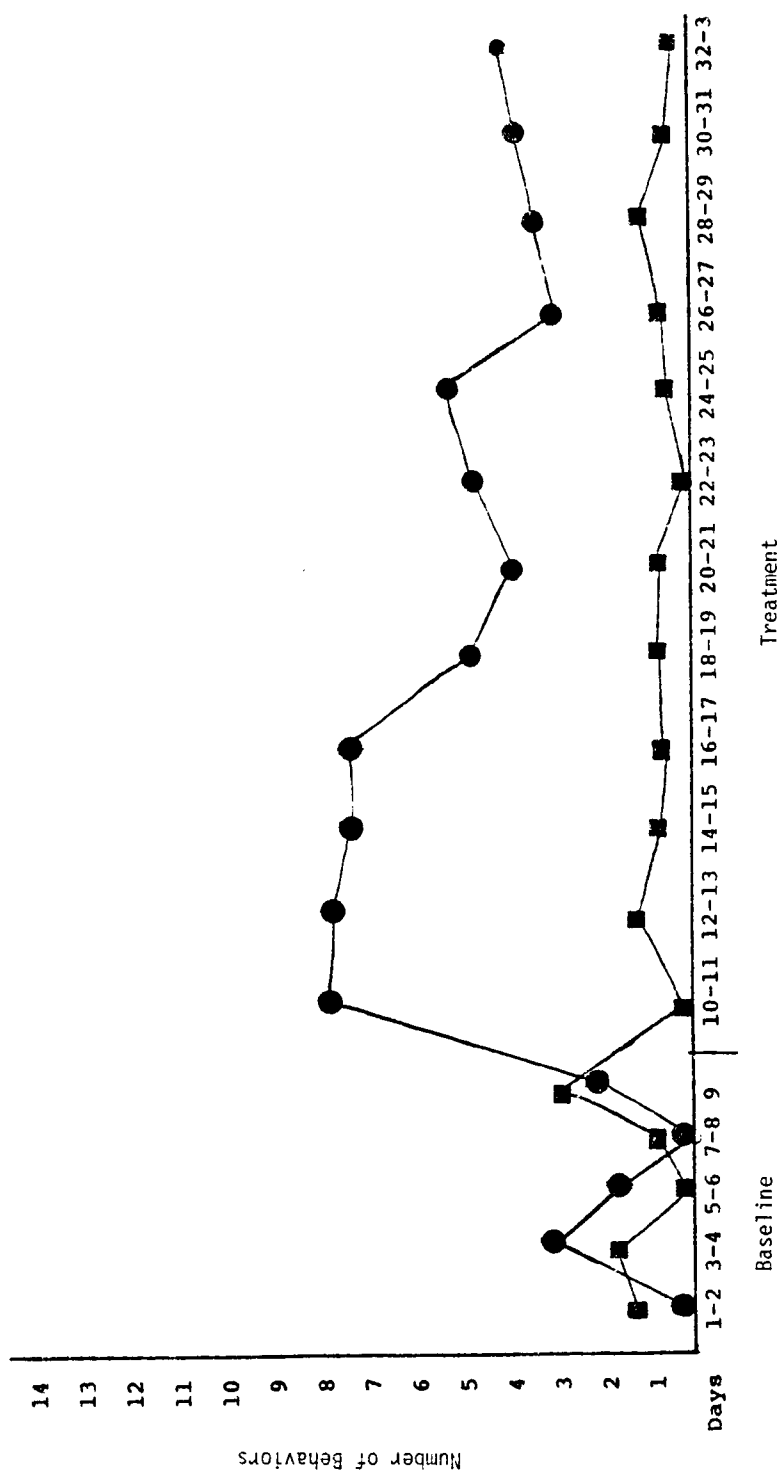


Figure 1. Teacher Behavior, Group 1. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.

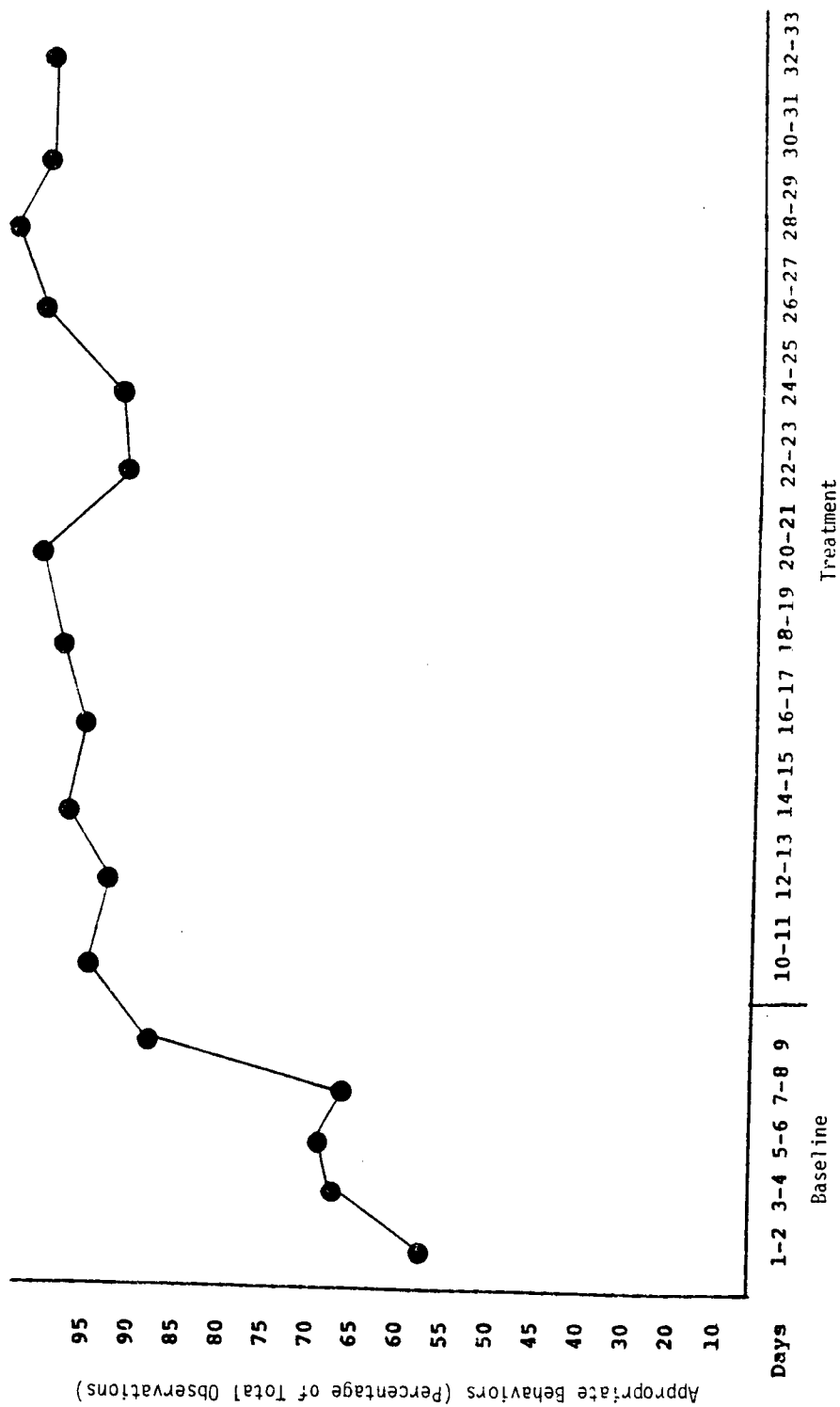


Figure 2. Student Behavior, Group 1.

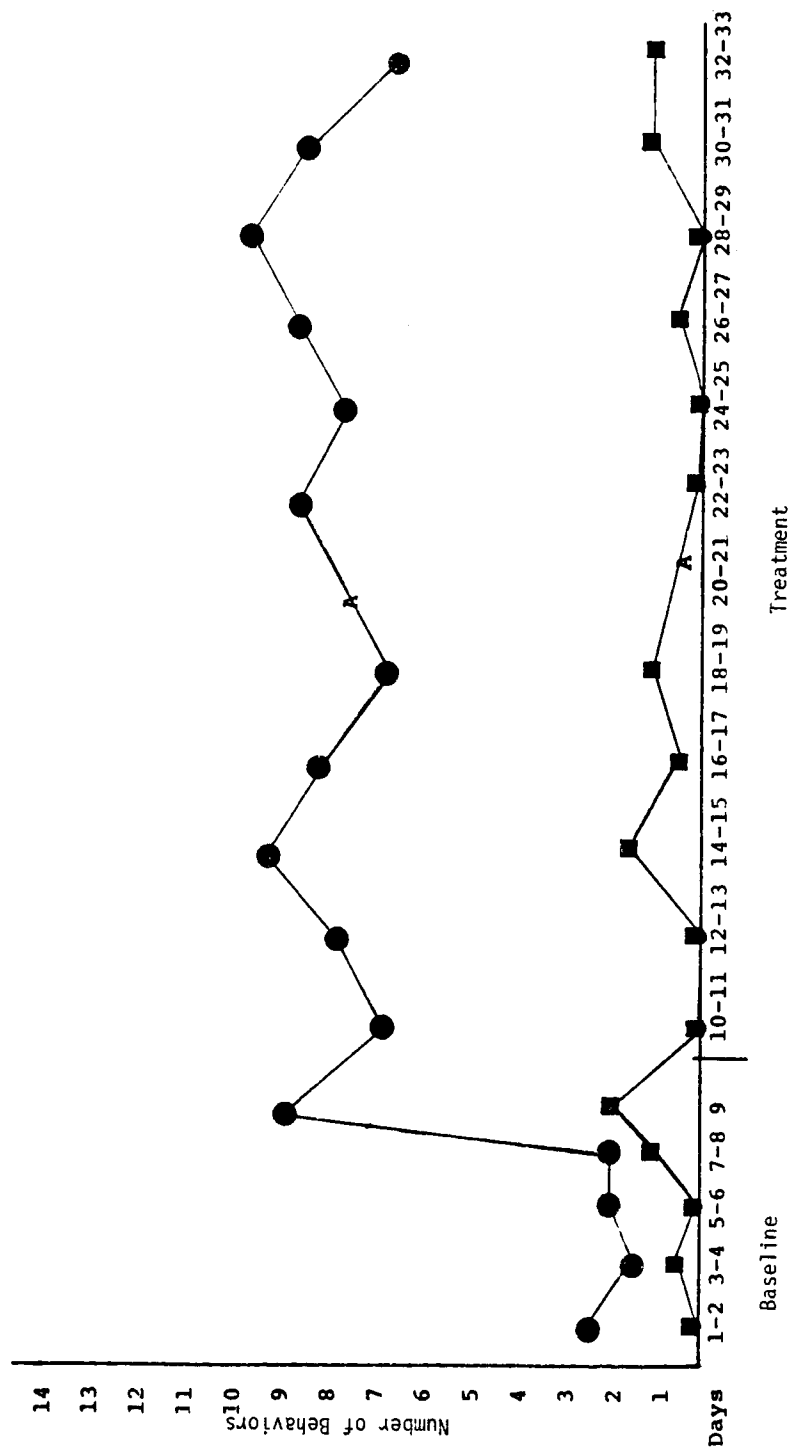


Figure 3. Teacher Behavior, Group 2. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.

increased from a mean of 2.0 during baseline to 8.72 during treatment, an increase of 6.72. The highest recorded frequency of teacher approvals was 3 during baseline and 10 during treatment. The average number of target disapprovals was .55 during baseline and .56 during treatment. Of all teacher participants, only one other registered a smaller number of target disapprovals across both conditions.

Figure 4 illustrates the changes in student behavior across conditions. Student A improved during treatment; however, Student B declined slightly. The mean percentages of appropriate behavior for Student A were 84 and 92 during baseline and treatment conditions respectively, revealing an increase of 8 percent. Student B, who obtained a mean percentage of 84 during baseline, declined to 82 percent during treatment. The average improvement of Student A and B in Group 2 was 3 percent.

The pre-test affective rating of the teacher in Group 2 was 113. Post-test results revealed a decrease of 9 points.

Group 3. Results of the frequencies of selected teacher behaviors from Group 3 are presented in Figure 5. The frequency of teacher target approvals averaged 1.50 during baseline. The mean number of target approvals during treatment was 8.2, an increase of 6.7. The highest number of recorded target approvals was 3 during baseline and 10 during treatment. The number of target disapprovals averaged .37 during baseline and .30 during treatment, the lowest frequency of target disapprovals across conditions of any teacher.

Results of target student behavior from Group 3 are presented in Figure 6. The mean percentage of appropriate behavior for Student A

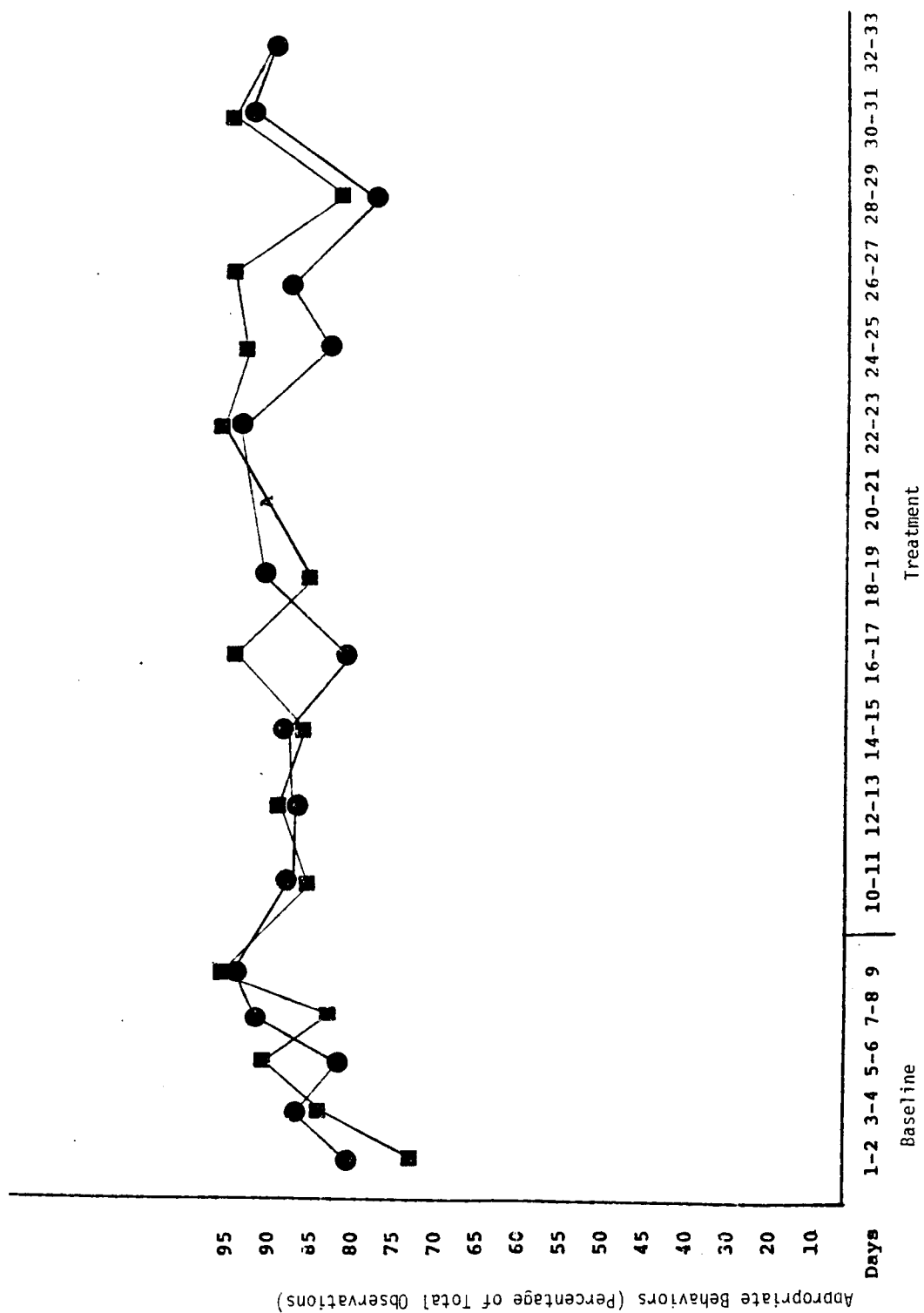


Figure 4. Student Behavior, Group 2. ● Student A; ■ Student B.

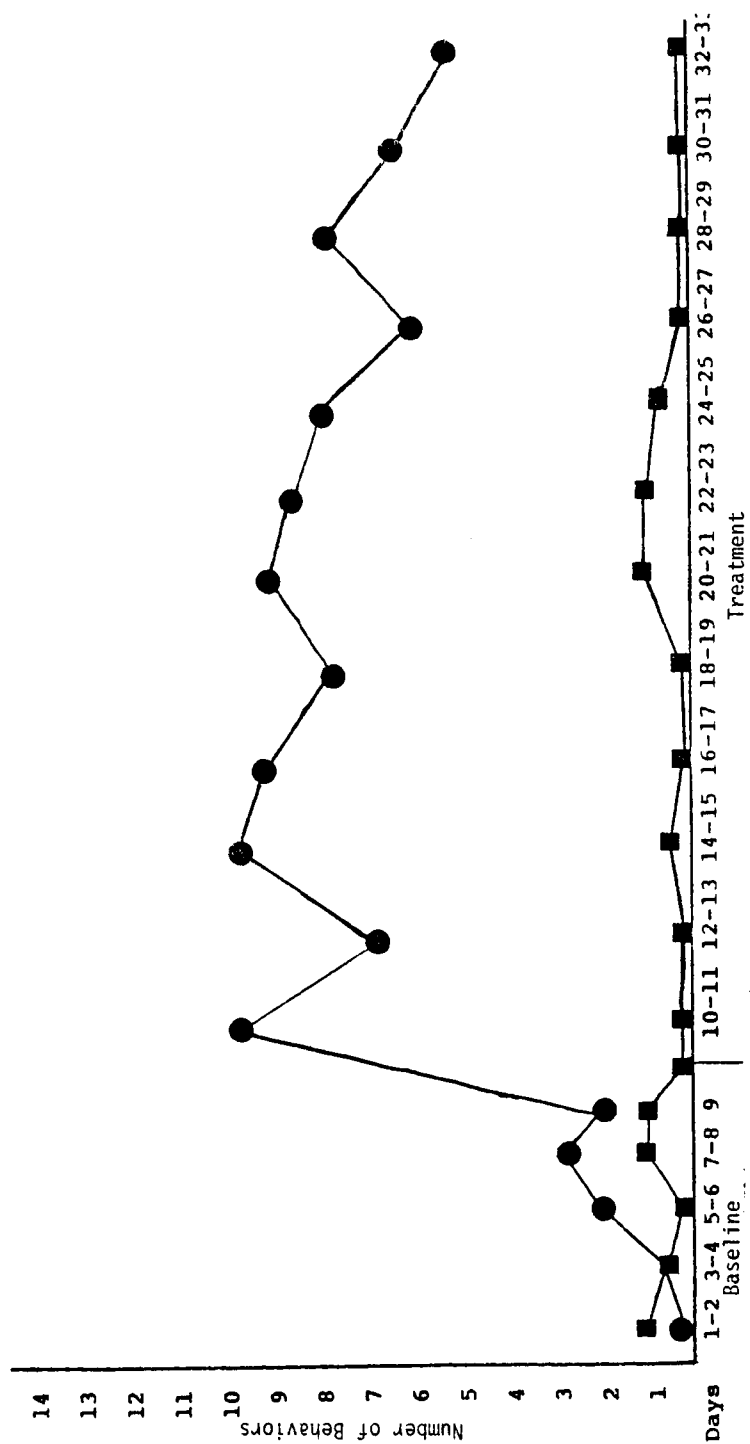


Figure 5. Teacher Behavior, Group 3. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.

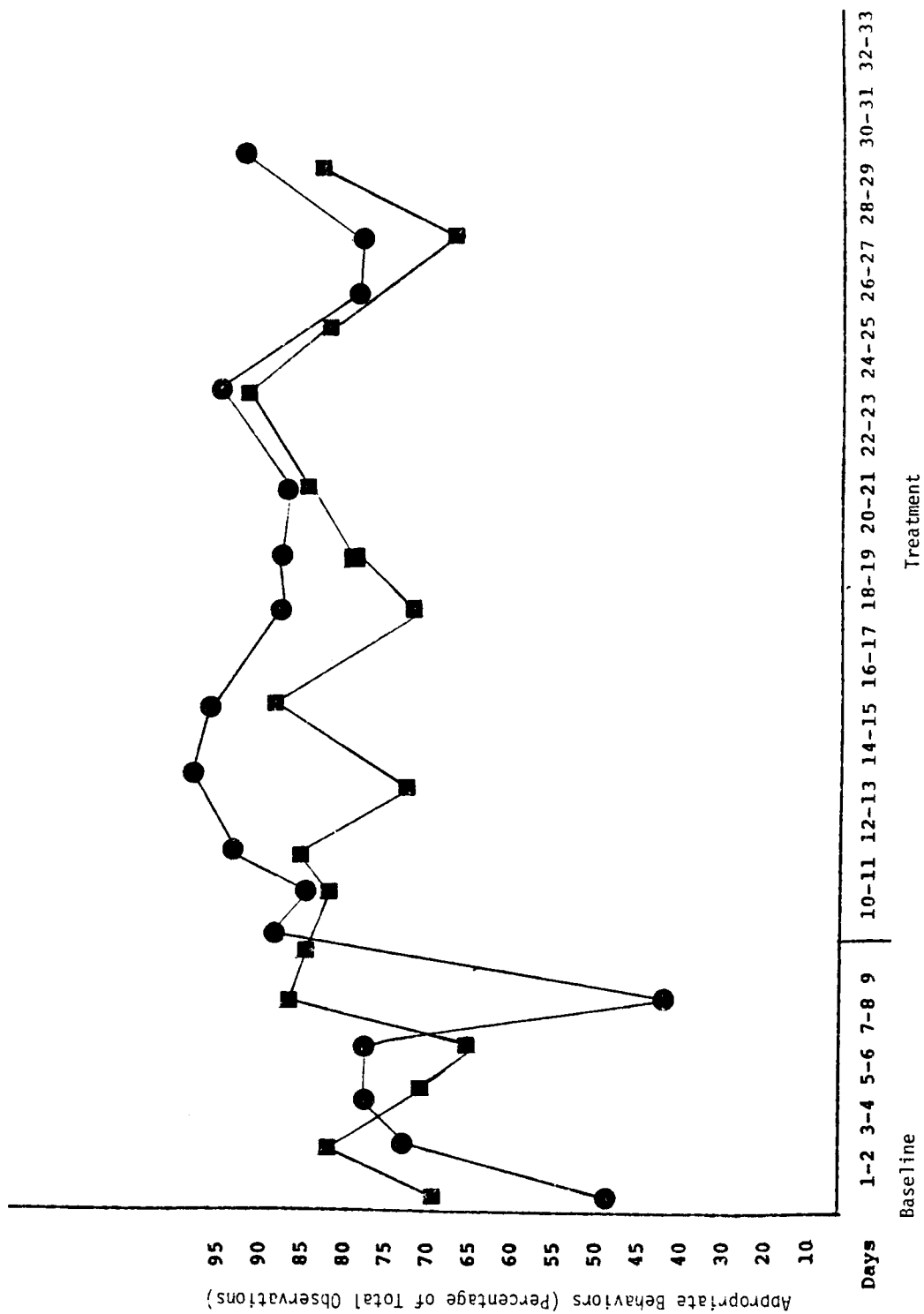


Figure 6. Student Behavior, Group 3. ● Student A; ■ Student B.

during baseline was 72. The mean percentage of appropriate behavior for the same student during treatment was 77, an increase of 5 percent in appropriate behavior. Student B improved from an average of 65 percent during baseline to 85 percent during treatment, an increase in appropriate behavior of 20 percent. The average increase in appropriate behavior of Students A and B in Group 3 was 13 percent.

Analysis of the affective ratings of the teacher in Group 3 reveals a composite score on the pre-test of 107. Students A and B reported affective scores of 71 and 36 respectively. Post-test results of the affective measure revealed a decline of 5 points in the score of Student A and an 8 point decline in the score of Student B, a total decline of 13. The post-test scores were still well above the minimum score of 90 which teachers had to obtain on the pre-test to qualify for the High Category.

Group 4. Figure 7 presents a graphic description of selected teacher behavior from Group 4. The frequency of target approvals increased from a mean of .66 during baseline to 8.57 during treatment, an increase of 7.91. The highest recorded frequency of target approvals was 3 during baseline and 10 during treatment. The average number of target disapprovals was .77 during baseline and .66 during treatment, a decrease of .11.

Figure 8 illustrates the changes in student behavior across conditions. Student A exhibited a 24 percent improvement in appropriate behavior during treatment. The percentage of improvement for Student B was 17. The average increase in appropriate behavior for Students A and B in Group 4 was 21 percent.

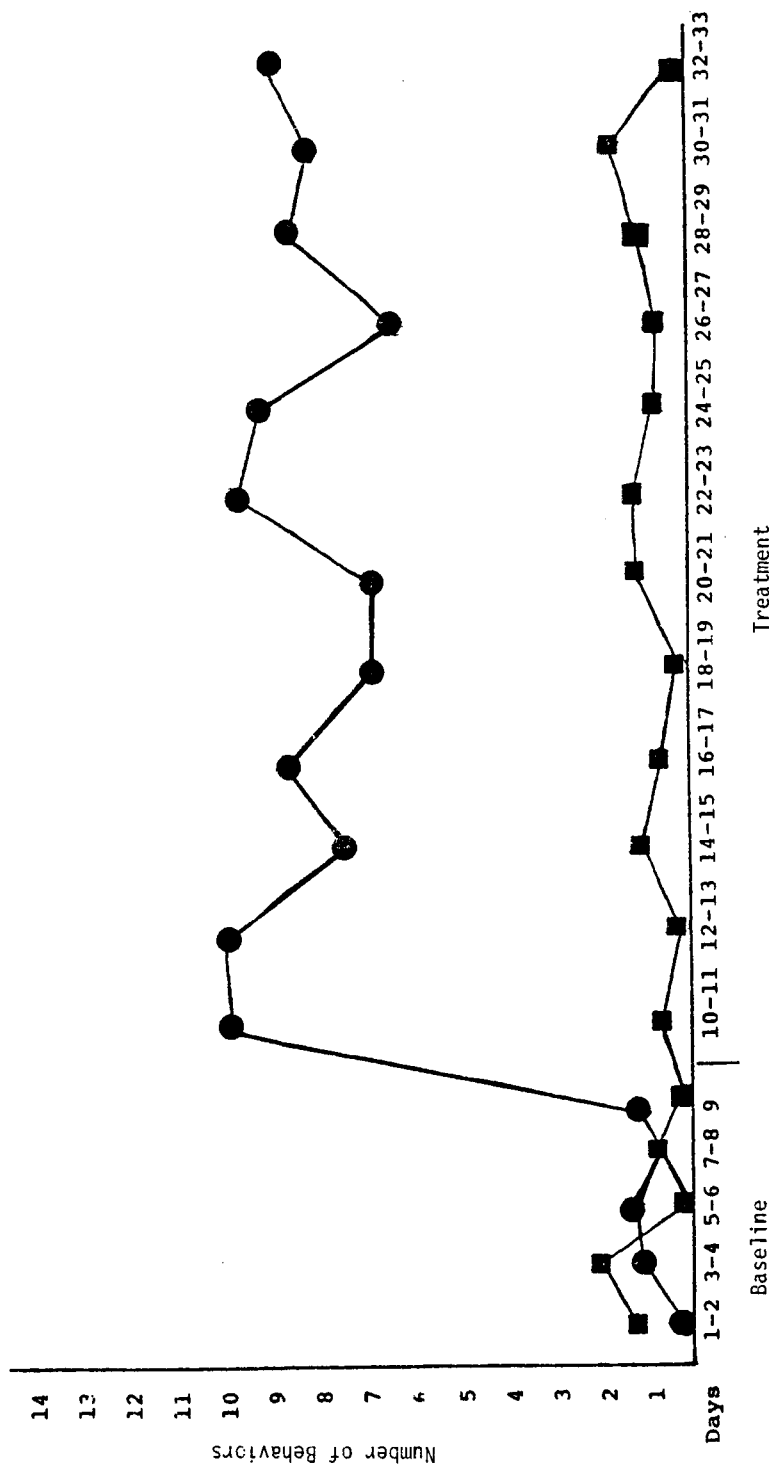


Figure 7. Teacher Behavior, Group 4. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.

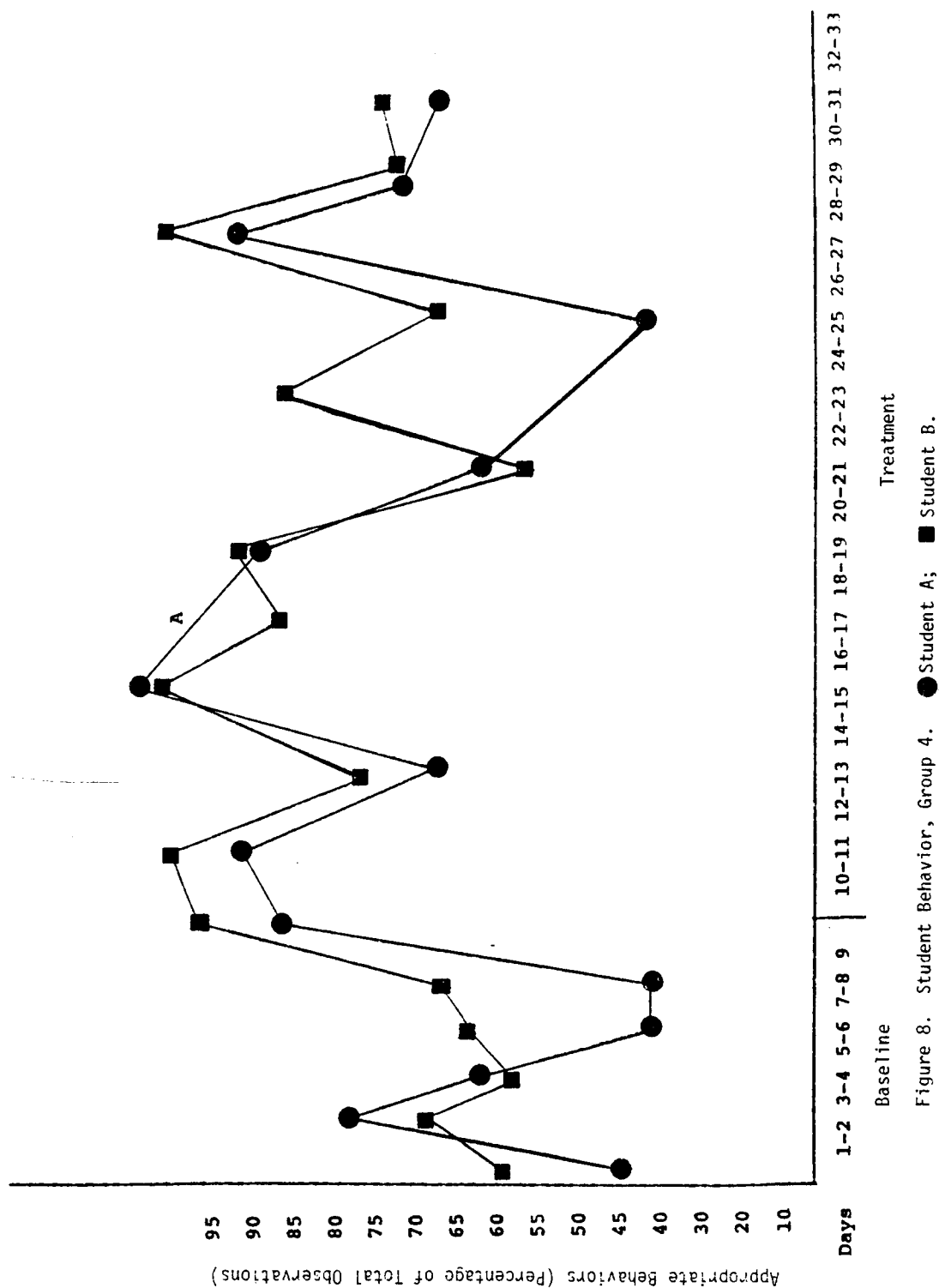


Figure 8. Student Behavior, Group 4. ● Student A; ■ Student B.

Post-test affective assessments revealed a 7 point decline in the combined scores of Students A and B. Student A rated the teacher in Group 4 eleven points higher on the post-test; however, the post-test score of Student B declined by 18 points.

Table 2 presents pertinent data comparisons and the average percentage of change in appropriate behavior of all groups in the High Category. Although data totals are presented for some measurements of the four groups, it is important to consider the absence of Student B in Group 1 and the effect the absence may have had on category totals.

The most significant data totals presented in Table 2 are the average percentage of change in appropriate behavior for the High Category and the amount of change in post-test affective ratings. The average increase in appropriate behavior of Students A and B for Groups 1-4 was 14 percent. Post-test ratings of teachers' affective scores declined from a total of 368 to 316, an average decline per student of 7.43.

Middle Category

Group 5. Results of the frequencies of selected teacher behavior from Group 5 are presented in Figure 9. The frequency of teacher target approvals averaged 1.22 per day during baseline. The mean number of target approvals during treatment was 7.80, an increase of 6.58. The highest number of recorded target approvals was 3 during baseline and 11 during treatment. The number of target disapprovals averaged 1.0 during baseline and .48 during treatment, a decrease of .52.

Results of target student behavior from Group 5 are presented in Figure 10. The mean percentage of appropriate behavior for Student A

TABLE 2
DATA COMPARISONS AMONG HIGH CATEGORY GROUPS

Groups	Teacher	Average Change in Appropriate Behavior	Change in Affective Post-Test Ratings
1	A	26%	-23
2	B	3%	- 9
3	C	13%	-13
4	D	21%	- 7
High Category Means		14%	-13

NOTE: Student B in Group 1 moved during treatment. Data in Group 1 are presented for Student A only. The average change in the affective post-test ratings of Groups 1-4 based on data from seven students was -7.43.

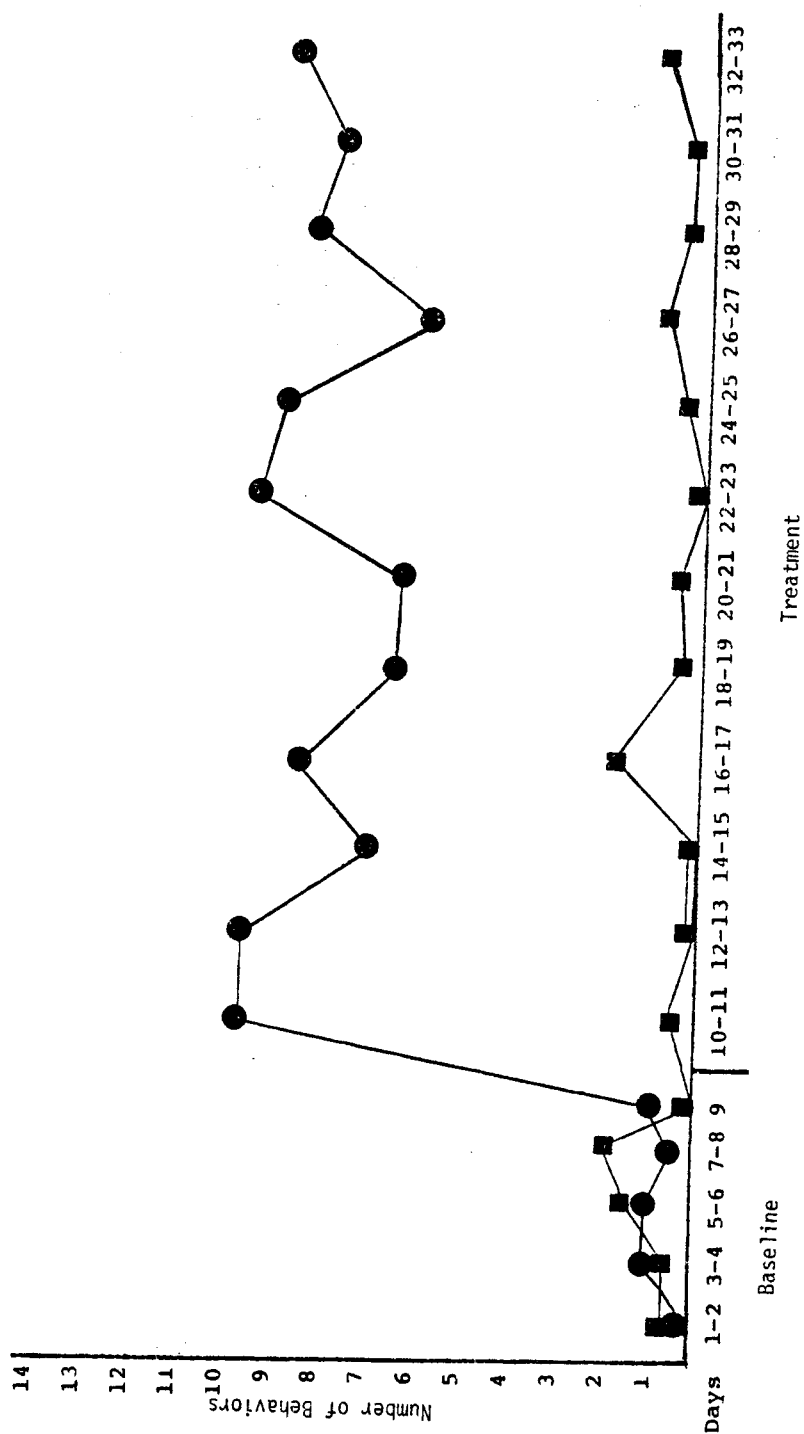


Figure 9. Teacher Behavior, Group 5. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.

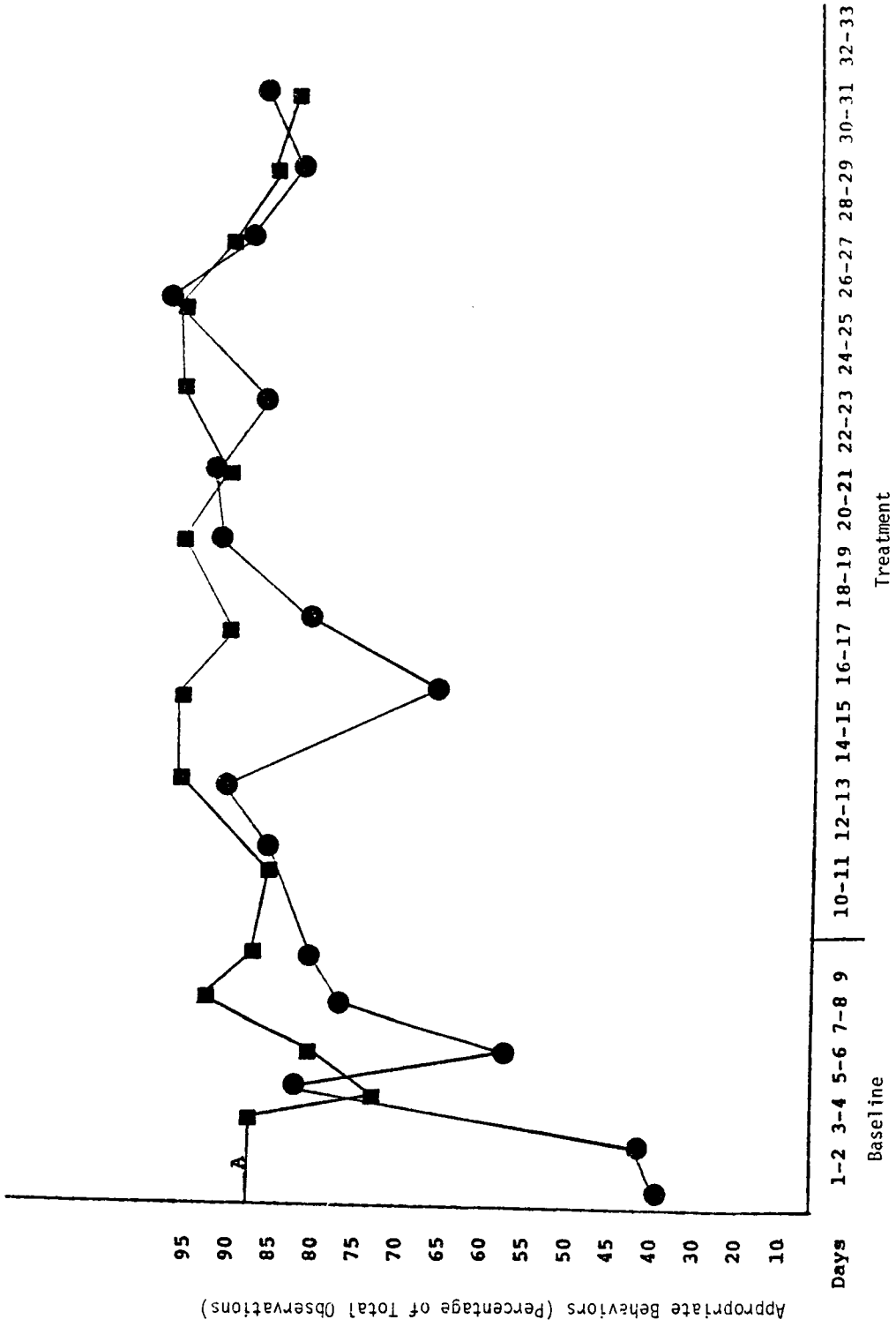


Figure 10. Student Behavior, Group 5. ● Student A; ■ Student B.

during baseline was 81. The mean percentage of appropriate behavior for the same student during treatment was 89, an increase of 8 percent in appropriate behavior. Student B improved from an average of 58 percent during baseline to 84 percent during treatment, an increase in appropriate behavior of 26 percent. The average increase in appropriate behavior of Students A and B in Group 5 was 17 percent.

Analysis of the pre-test affective ratings of the teacher in Group 5 revealed a composite score of 72. Students A and B reported scores of 46 and 26 respectively. Post-test results of the affective measure revealed an increase of 5 points in the affective score of Student A and a 12 point increase in the score of Student B, a total increase of 17. Group 5 was the first group to register an improvement in the post-test affective scores from both target students.

Group 6. Results of selected teacher behaviors are presented in Figure 11. The frequency of teacher target approvals was .85 during baseline. The mean number of target approvals during treatment was 7.48, an increase of 6.63. The highest number of recorded target approvals was 2 during baseline and 10 during treatment. The number of target disapprovals averaged .85 during baseline and .65 during treatment.

Results of target student behavior from Group 6 are presented in Figure 12. The mean percentages of appropriate behavior for Student A during baseline and treatment were 52 and 72 respectively, an increase of 20 percent in appropriate behavior. Student B improved during treatment by 29 percent over his baseline score of 53. The percent of improvement for Student B (29) was the largest reported for any student

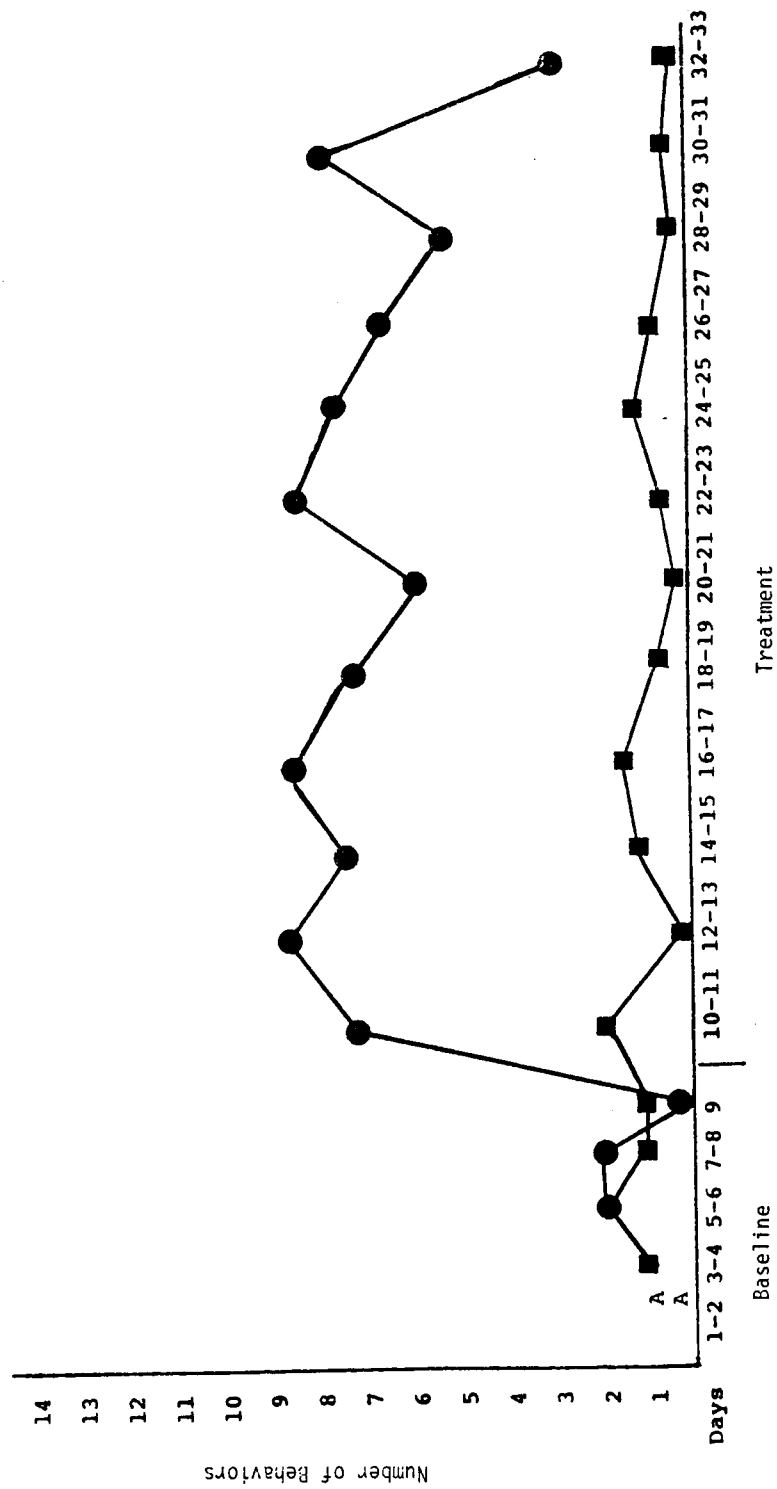
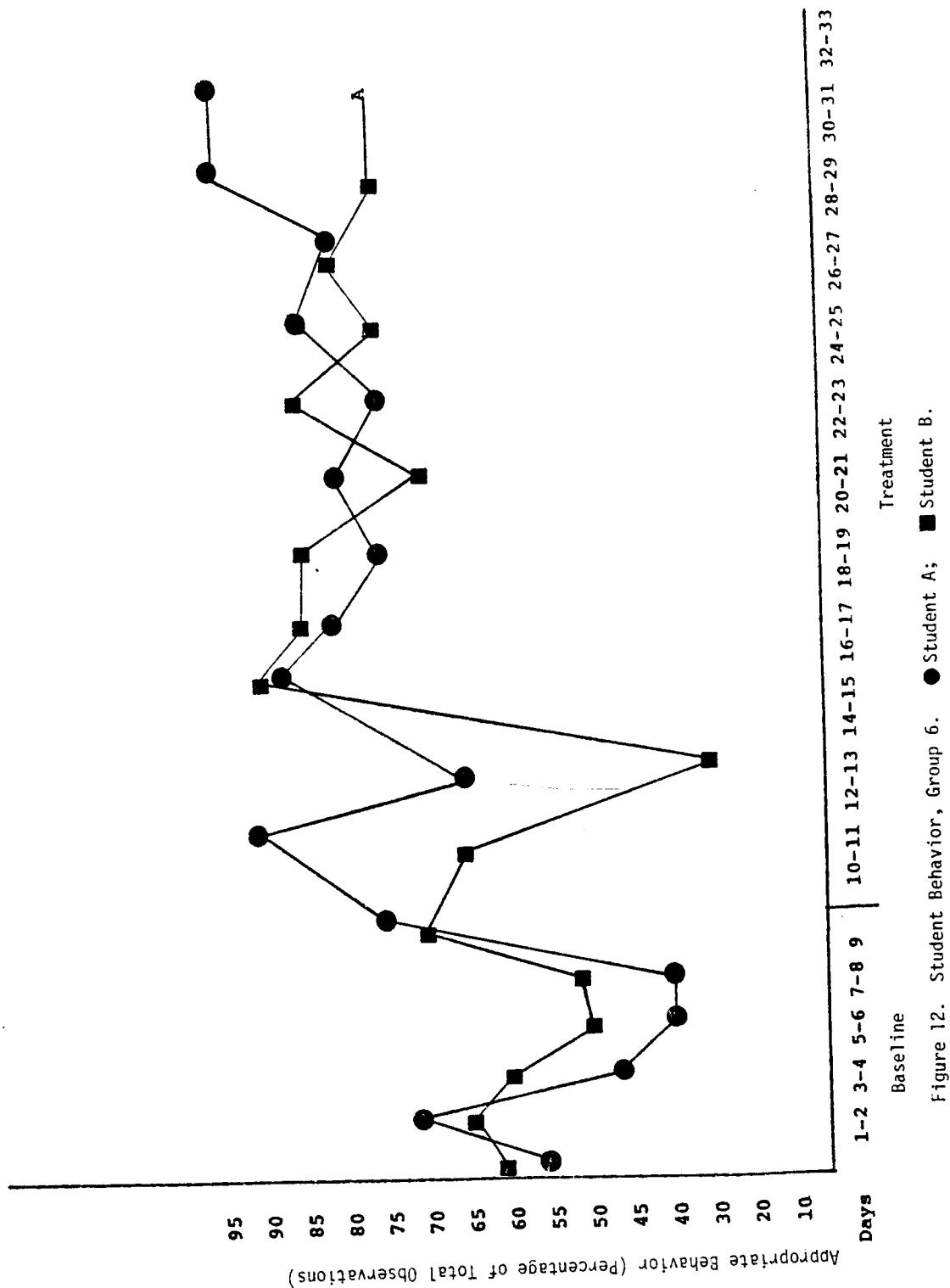


Figure 11. Teacher Behavior, Group 6. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.



in the experiment. The average percentage of improvement for Students A and B in Group 6 was 25, the largest average increase reported for any group in the experiment. Note: Student A in Group 1 improved by 26 percent during treatment but Student B in the same group moved during the experiment so it was impossible to obtain an average rating for Group 1.

The affective scores of Students A and B in Group 6 on the pre-test were 17 and 31 respectively. Student B recorded a post-test score of 40 indicating a 9 point increase; however, the post-test score of Student A declined by 19 points. Student A had been referred, by another of his teachers, to the "in-school suspension room" on the day the post-test was administered. It is conceivable that his involvement in a serious discipline problem on the day of the post-test affected his judgment of the teacher of Group 6.

Group 7. Figure 13 presents selected teacher behaviors of Teacher G, the third lowest teacher in the Middle Category. Target approvals averaged 1.33 during baseline and 6.90 during treatment, an increase of 5.57. This was the smallest recorded increase in target approvals to occur in the Middle Category. The highest number of target approvals in Group 7 during baseline was 5 and the highest number during treatment was 10. Teacher disapprovals averaged 1.10 during baseline and .45 during treatment, a decrease of .65.

Figure 14 shows comparisons and changes in the appropriate behavior of Students A and B in Group 7. Student A improved from an average percentage during baseline of 69 to an average percentage during treatment of 85, an improvement of 16 percent. Student B

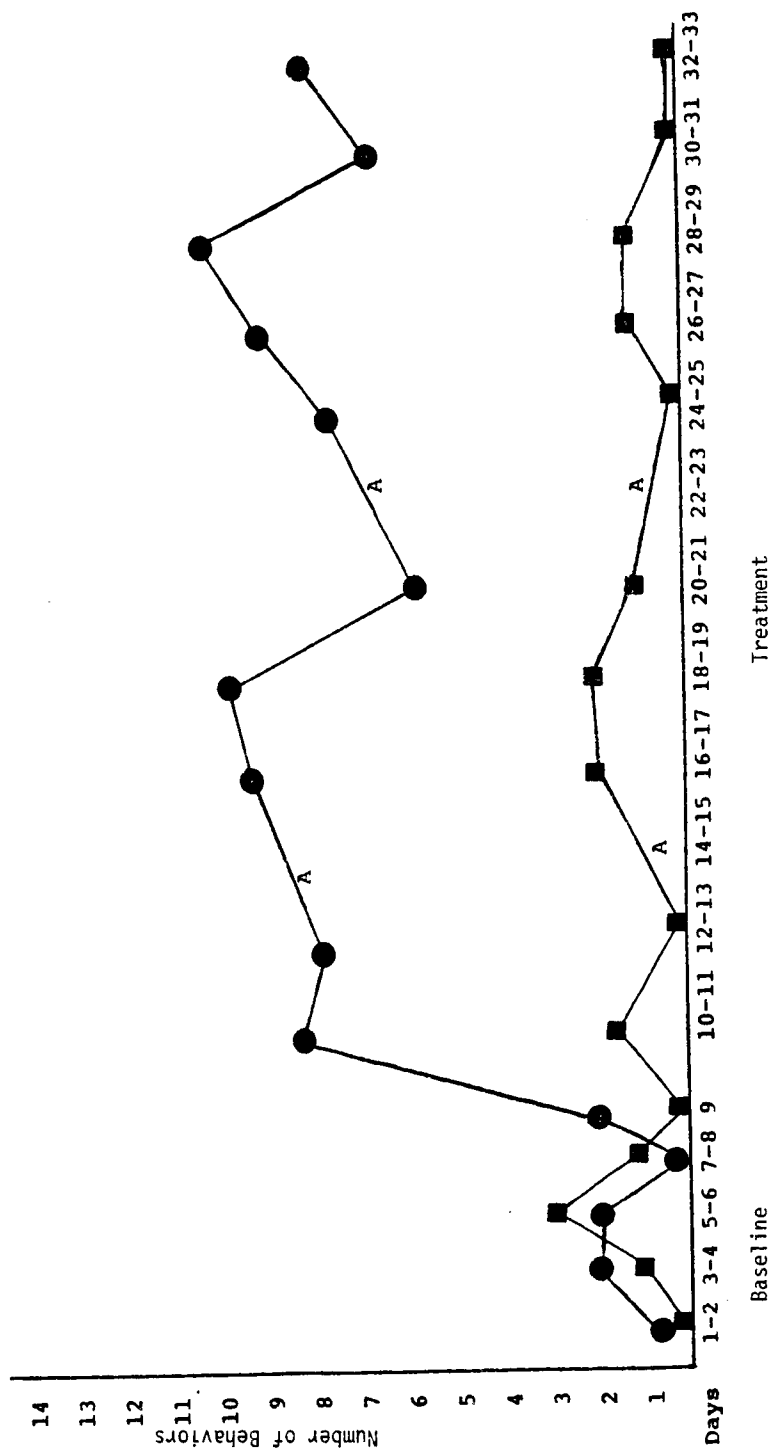


Figure 13. Teacher Behavior, Group 7. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.

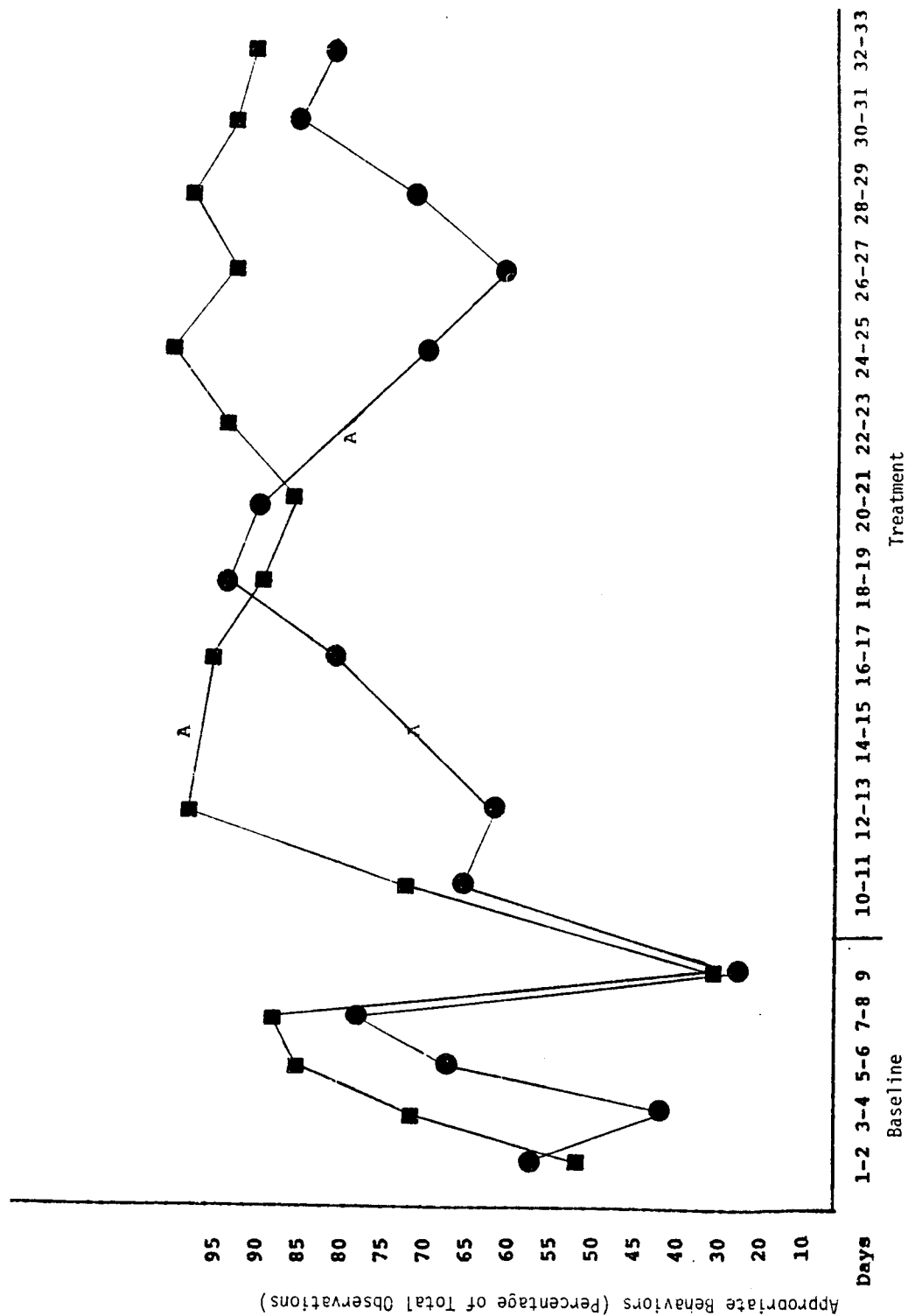


Figure 14. Student Behavior, Group 7. ● Student A; ■ Student B.

exhibited a similar improvement across conditions demonstrating a 15 percent improvement during treatment. The data are quite consistent between Students A and B, especially during treatment, suggesting that some common extraneous variables may have had a significant effect on their behavior.

The pre-test affective scores of Students A and B were 32 and 5 respectively. Post-test scores revealed a 15 point decline in the affective score of Student A. Student B rated the teacher 22 points higher on the post-test.

Group 8. The frequencies of selected teacher behaviors from Group 8 are presented in Figure 15. The number of target disapprovals across baseline and treatment conditions was higher in Group 8 than in any other group in the experiment. The number of disapprovals averaged 3.1 during baseline and 1.96 during treatment. Teacher approvals averaged .55 during baseline and 6.96 during treatment, an increase of 6.41. The highest recorded frequency of target approvals was 2 during baseline and 10 during treatment. The highest frequency of target disapprovals was 7 during baseline and 5 on two days during treatment.

Target student behavior comparisons are presented in Figure 16. The smallest average percentage of increase in appropriate behavior in the Middle Category occurred in Group 8. Student A averaged 68 percent appropriate behavior during baseline and 77 percent during treatment, an increase of 9 percent. Student B averaged 73 percent and 78 percent in appropriate behavior during baseline and treatment conditions respectively, an increase of 5 percent. The average increase in Group 8 was 7 percent.

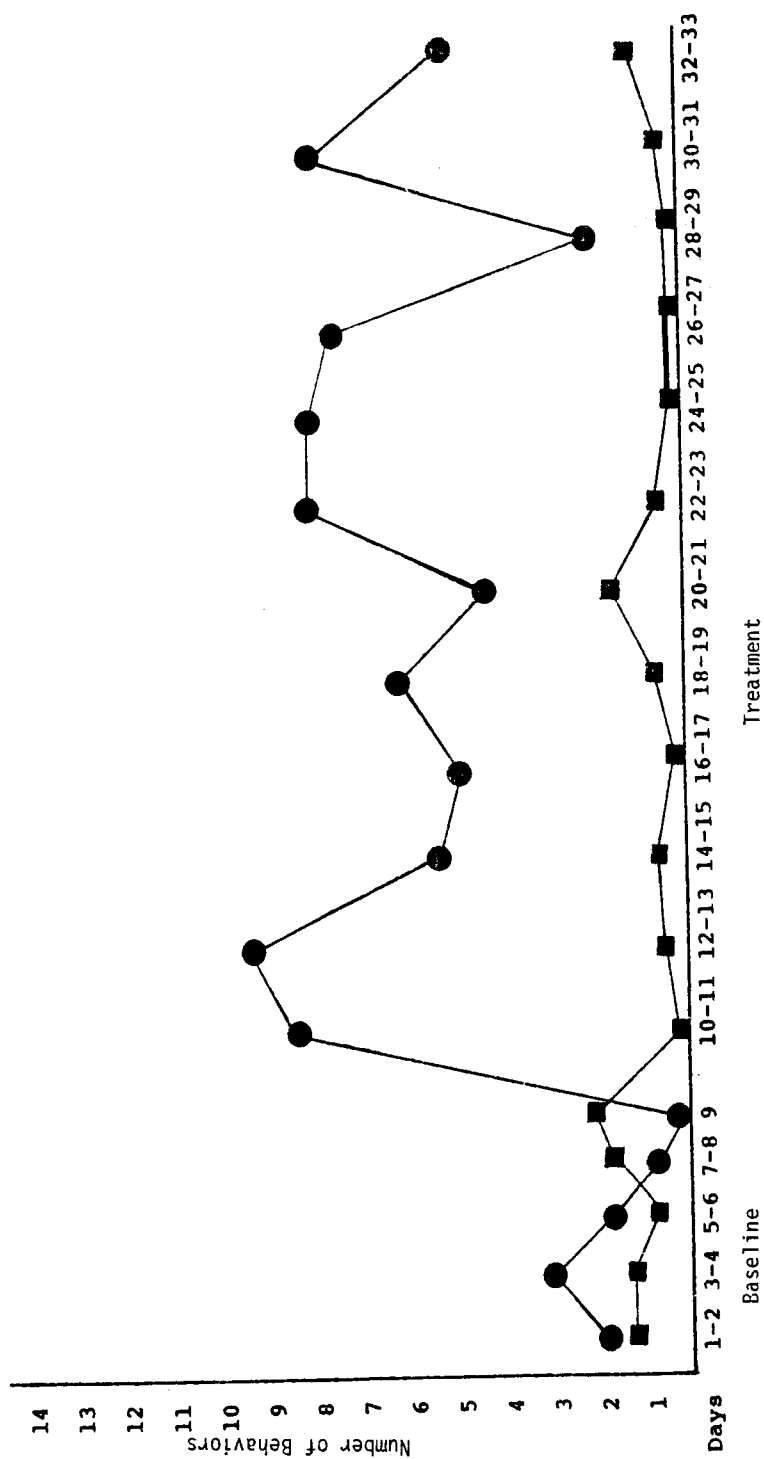
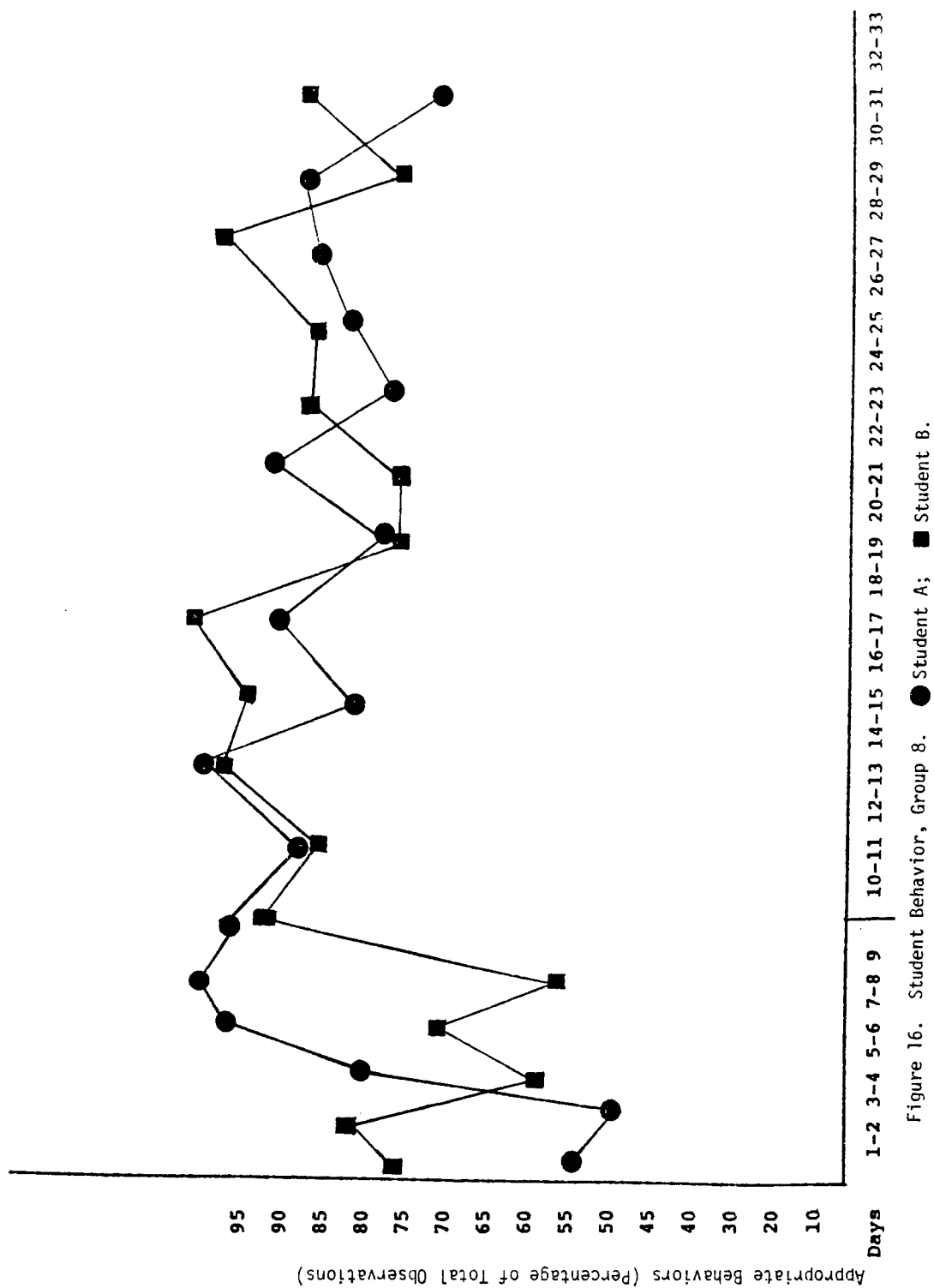


Figure 15. Teacher Behavior, Group 8. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.



Initial student affective ratings of the teacher in Group 8 were the lowest within the Middle Category. Student A reported a pre-test score of 14; however, Student B reported a pre-test score of -2. Post-test scores of Students A and B were 20 and 24 respectively, an increase of 32 points over pre-test scores.

Table 3 presents data comparisons and the average percentage of change in appropriate behavior for the four groups in the Middle Category. The affective post-test total for the four groups exceeded the pre-test total by 46 points, an average increase of 5.75 points. This increase was 13.18 points above the average change in the post-test scores for the High Category, which experienced an average decline of 7.43 points per student. The average increase in appropriate behavior for the Middle Category was 16 percent, a marginal increase of 2 percent over the High Category.

Low Category

Data from three of the four groups originally classified in the Low Category are presented in this section. One teacher in the Low Category consistently failed to comply with the guidelines of the research, thereby necessitating the deletion of one set of data.

Group 9. Figure 17 presents selected teacher behaviors from Group 9. Target approvals averaged 1.22 during baseline and 8.76 during treatment, an increase of 7.54. This was the largest increase in target approvals in the Low Category and the second largest increase in the experiment. The highest number of target approvals in Group 9 during baseline was 4 and the highest number during treatment was 11.

TABLE 3
DATA COMPARISONS AMONG MIDDLE CATEGORY GROUPS

Groups	Teacher	Average Change in Appropriate Behavior	Change in Affective Post-Test Ratings
5	E	17%	+8.5
6	F	25%	-5.0
7	G	16%	+3.5
8	H	7%	+16
Middle Category Means		16.25%	+5.75

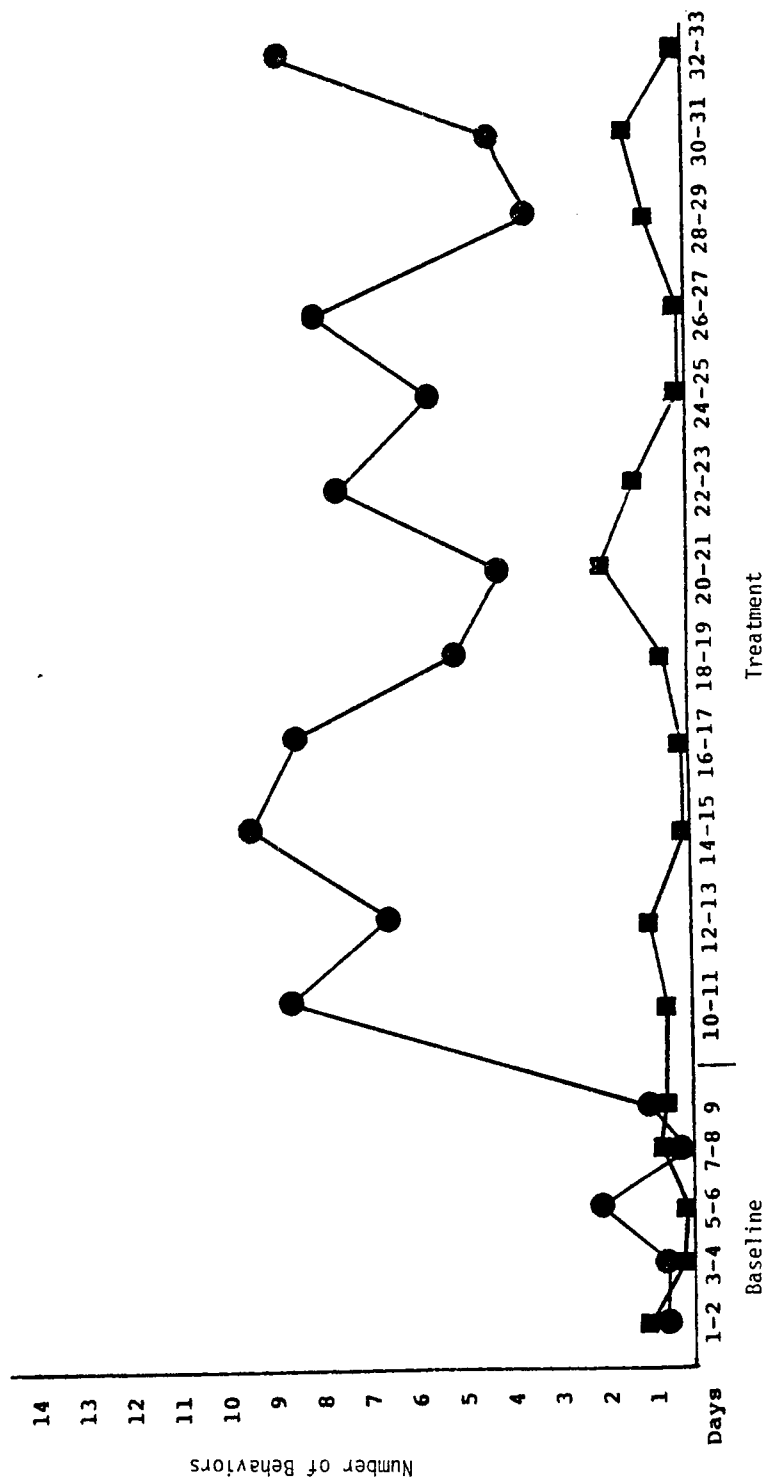


Figure 17. Teacher Behavior, Group 9. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.

Teacher disapprovals averaged .89 during baseline and .94 during treatment, a marginal increase.

Figure 18 presents results of target student behavior across conditions. The mean percentage of appropriate behavior for Student A during treatment was 86, an increase of 18 percent. Student B improved from an average of 57 percent during baseline to 74 percent during treatment, an increase in appropriate behavior of 17 percent.

Analysis of the affective ratings of the teacher in Group 9 reveals a composite score on the pre-test of -16. Students A and B reported scores of -18 and +2 respectively. Post-test results revealed a 28 point increase for Student A and a 16 point increase for Student B, a total increase of 44 points.

Group 10. Selected teacher behaviors from Group 10 are presented in Figure 19. The average frequencies of target approvals during baseline and treatment conditions were .25 and 5.63, respectively. Teacher disapprovals declined from an average of 1.87 during baseline to an average of .81 during treatment. The highest number of recorded target disapprovals was 7 during baseline and 3 during treatment.

A graphic illustration of student behavior changes across conditions is presented in Figure 20. Student A exhibited a 16 percent increase in appropriate behavior during treatment. A 10 percent improvement in appropriate behavior was recorded for Student B. The average increase in appropriate behavior for Students A and B in Group 10 was 13 percent, the lowest increase within the Low Category. The average baseline percentages were 54 and 70, respectively.

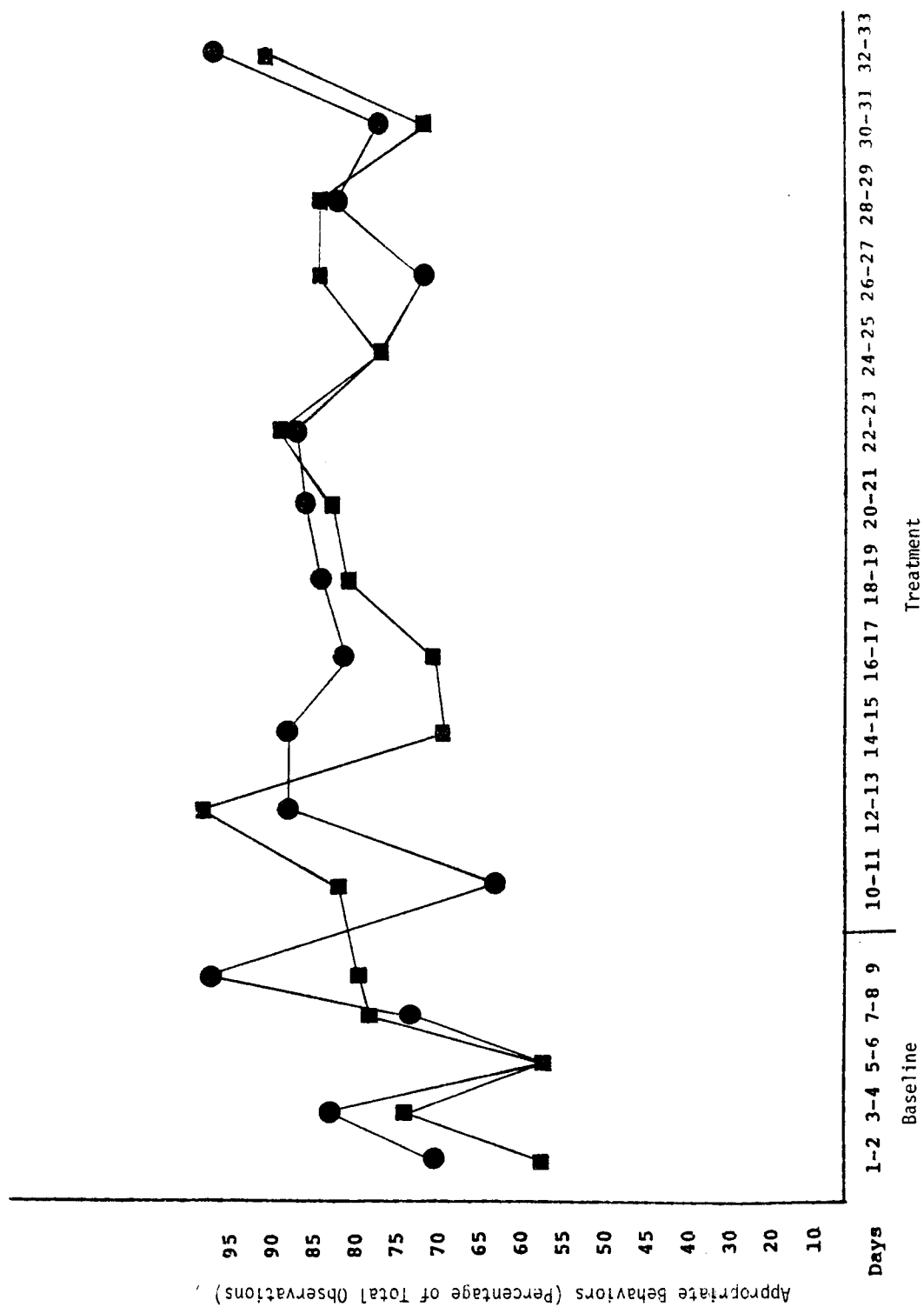


Figure 18. Student Behavior, Group 9.

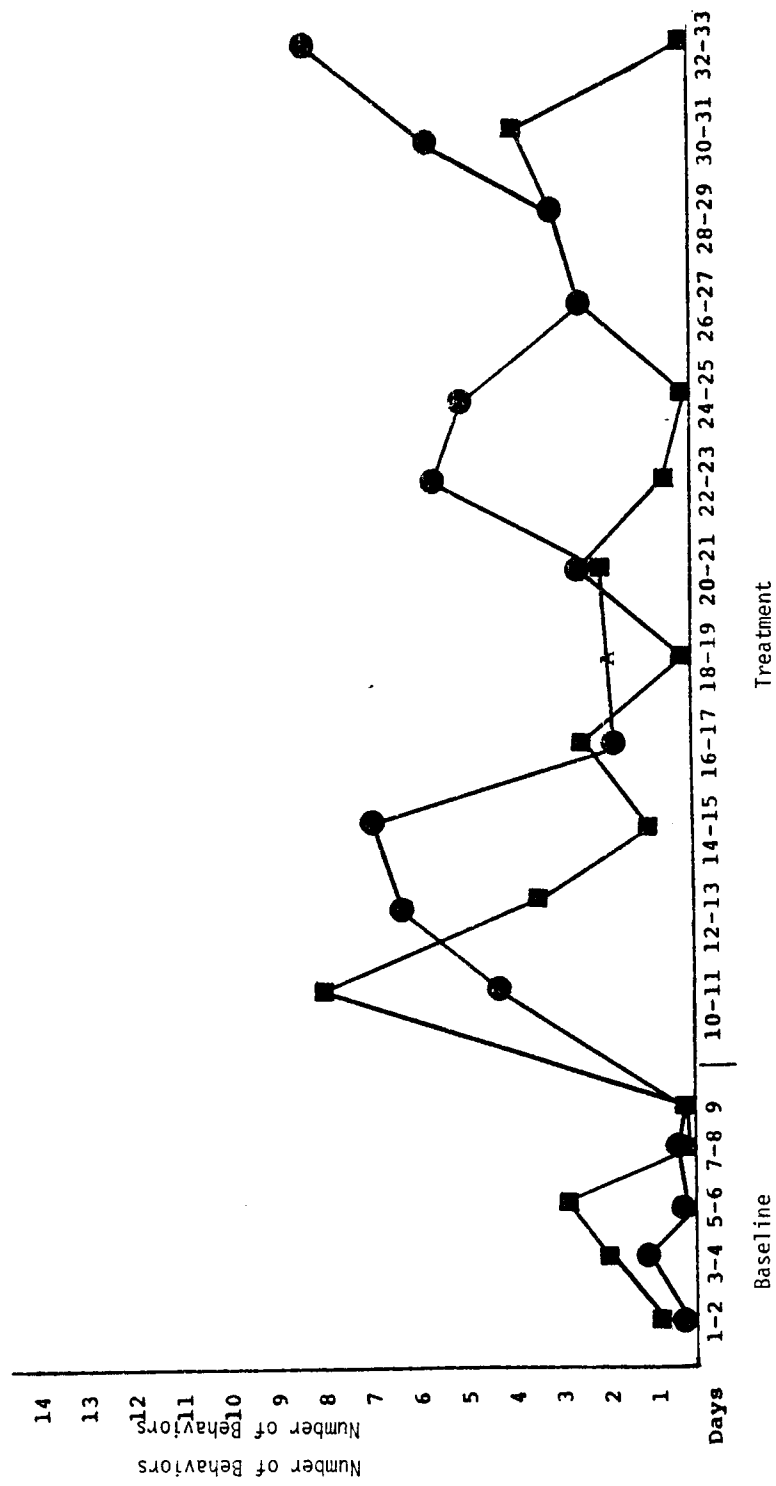


Figure 19. Teacher Behavior, Group 10. ● Teacher Target Approvals; ■ Teacher Target Disapprovals.

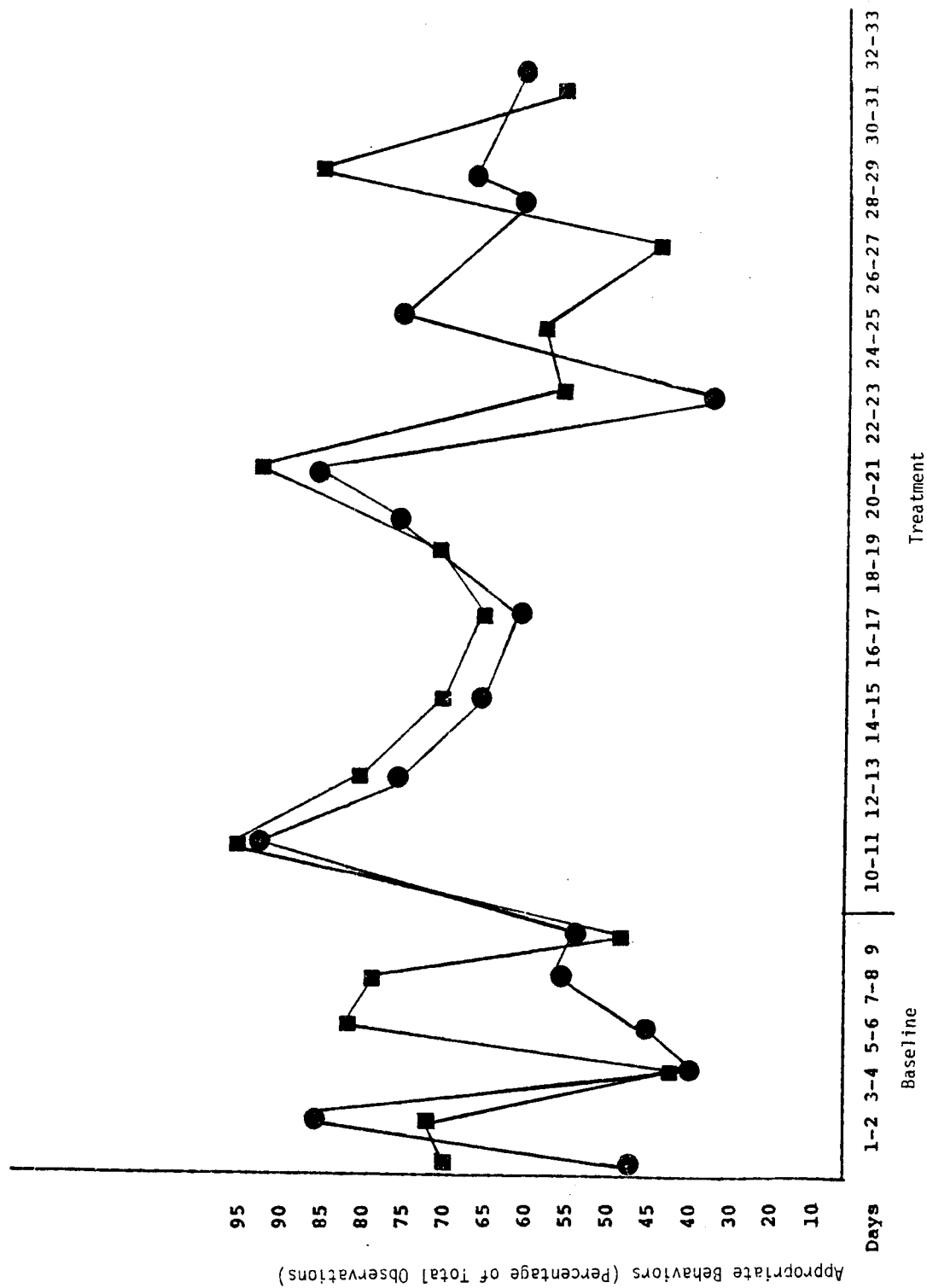


Figure 20. Student Behavior, Group 10. ● Student A; ■ Student B.

Affective pre-test scores for Group 10 totaled -46. Student A recorded a pre-test score of -19 and a post-test score of +8, a 27 point increase. Student B recorded a pre-test score of -27 and decreased to -39 on the post-test, a decline of 12 points. The average change in the post-test scores of Students A and B was an increase of 8, the smallest increase in the Low Category.

Group 11. Teacher approvals and disapprovals of target students in Group 11 are presented in Figure 21. Target approvals increased from an average of .33 during baseline to an average of 4.95 during treatment. Disapprovals declined from an average of 2.44 during baseline to 1.9 during treatment. The highest number of target approvals was 2 during baseline and 9 during treatment. Seven target disapprovals occurred on one day during baseline. The highest number of disapprovals during treatment was 5.

Figure 22 presents the results of student behavior changes across conditions. Student A exhibited a 17 percent increase in appropriate behavior during treatment. Student B exhibited an increase of 25 percent. The average change in appropriate behavior for Students A and B in Group 11 was 21 percent, the highest percentage of improvement within the Low Category. The average baseline percentages for Students A and B were 69 and 28.

Affective pre-test scores reported by target students within Group 11 were the lowest of all groups. Students A and B recorded pre-test scores of -57 and -30 respectively. The total pre-test score affective score of Group 11 was -87. Post-test affective scores of Students A and B totaled -19, an increase of 68 points, the largest increase of any group in the experiment.

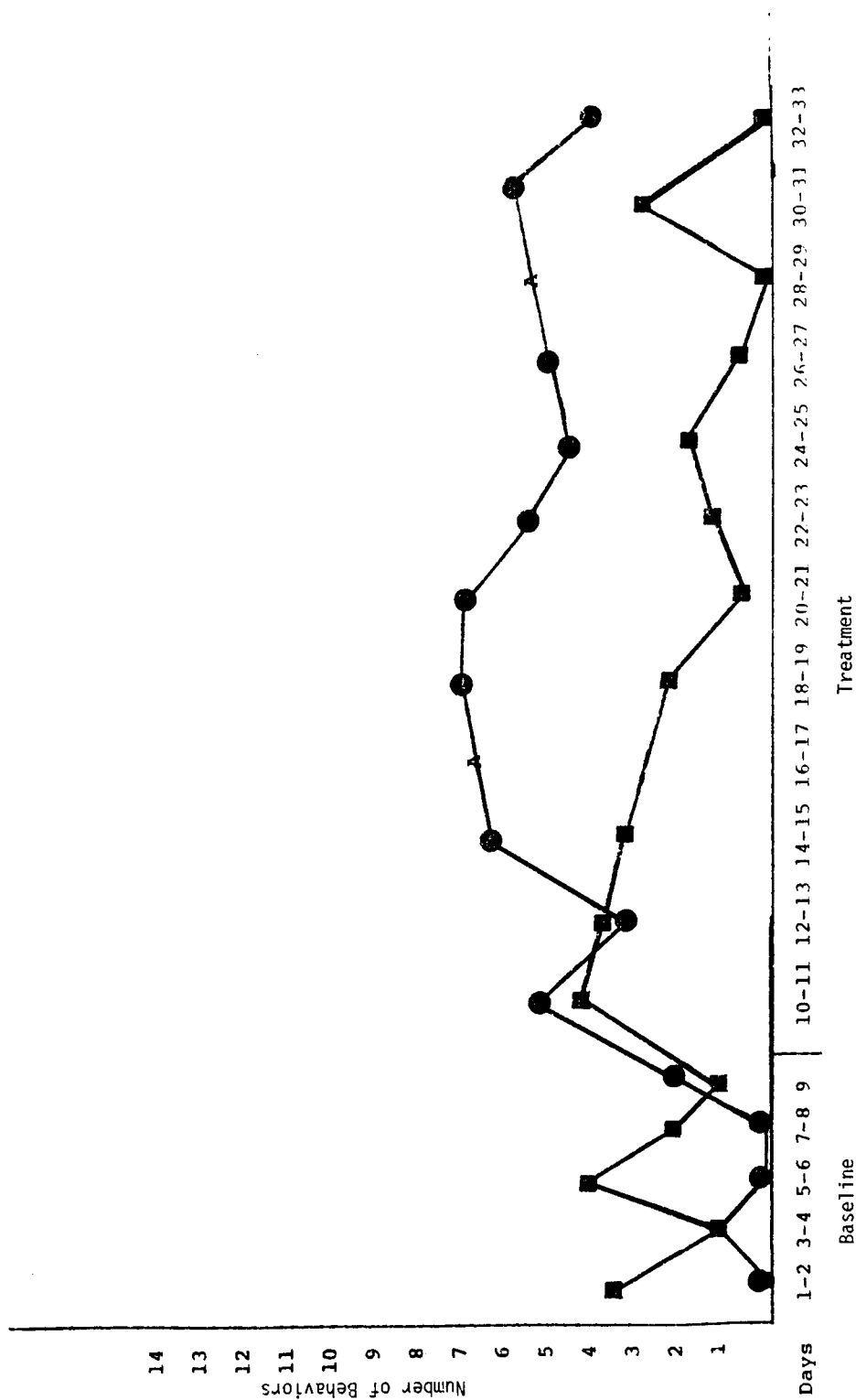


Figure 21. Teacher Behavior, Group 11. ● Teacher Target Approvals; ■ Teacher Target Disapprovals

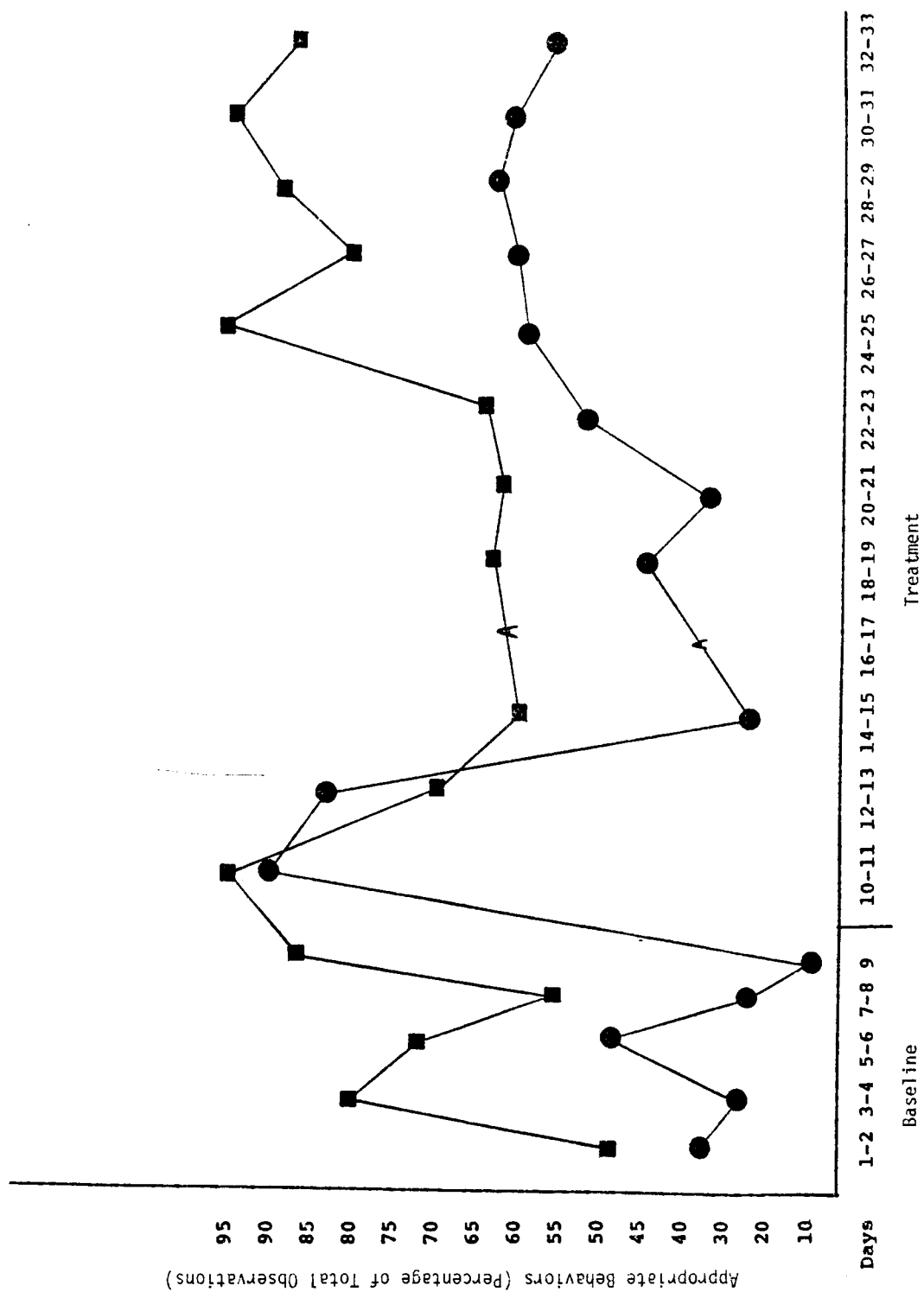


Figure 22. Student Behavior, Group 11. ● Student A; ■ Student B.

Table 4 presents data comparisons and the average percentage of change in appropriate behavior for the three groups in the Low Category. The affective post-test total for the three groups exceeded the pre-test total by 127 points, an average increase of 21.2 points per student. This increase was 28 points above the average change in the affective post-test scores for the High Category and 15 points above the affective post-test average for the Middle Category. The average increase in appropriate behavior for the Low Category was 17 percent, a minimum increase of 3 percent over the High Category and 1 percent over the Middle Category.

A summary of the main results for all categories is presented in Table 5. Compared to the Middle and High Categories, the Low Category exhibited a slightly higher increase in the average percentage of appropriate student behavior and the greatest positive change in the affective post-test scores. The High Category registered the highest average increase in target approvals during treatment.

TABLE 5
DATA COMPARISONS AMONG LOW CATEGORY GROUPS

Groups	Teacher	Average Change in Appropriate Behavior	Average Change in Affective Post-Test Ratings
9	I	18%	+22
10	J	13%	+ 7.5
11	K	21%	+34
Low Category Means		17%	+21.2

TABLE 5

CATEGORY COMPARISONS

Group	Teacher	Category	Average Changes in Appropriate Student Behavior	Change in Affective Post-Test Ratings	Increase in Target Student Approvals During Treatment
1	A	High	26%	-23	*3.92
2	B	High	3%	- 9	6.72
3	C	High	13%	-13	6.70
4	D	High	21%	- 7	7.91
High Category Averages:			14%	- 7.43	6.70
5	E	Middle	17%	+ 8.5	6.58
6	F	Middle	25%	- 5.0	6.63
7	G	Middle	16%	+ 3.5	5.57
8	H	Middle	7%	+16.0	6.41
Middle Category Averages:			16%	+ 5.75	6.29

TABLE 5. Continued

Group	Teacher	Category	Average Changes in Appropriate Student Behavior	Change in Affective Post-Test Ratings	Increase in Target Student Approvals During Treatment
9	I	Low	18%	+22.0	7.54
10	J	Low	13%	+ 7.5	5.38
11	K	Low	21%	+34.0	4.62
Low Category Averages:			17%	+21.2	5.85

*Data from Target Student A only.

CHAPTER IV

DISCUSSION

The data are not supportive of the contention that the effectiveness of a teacher's approval increases in relation to his/her level of affective skill. The results of this experiment suggest that students respond as well, as in some cases slightly better, to teachers who are less affectively skilled. Differences between categories were minimal, however. The results indicate no substantial differences in the effectiveness of teachers in the three categories. Target students in the Low Category exhibited increases in appropriate behavior of 3 percent and 1 percent above the High and Middle Categories, respectively.

One of the most important conclusions derived from this research is that regardless of a teacher's level of affective skill, he/she can effectively improve the behavior of disruptive students through teacher approval. Data from all categories confirm this conclusion and, thereby, help substantiate the results of numerous other studies that demonstrate the value of teacher approval as an effective classroom contingency. In the present study, even teachers who were rated lowest on the affective scale, were effective in modifying behavior. In view of the difficulties inherent in identifying effective classroom management strategies, this conclusion is especially important.

Although the average percentage of increase in appropriate behavior among the Middle and Low Categories was marginally superior

to the High Category, it is important to note that target students in the High Category exhibited an average of 85 percent appropriate behavior during treatment compared to 81 percent and 74 percent in the Middle and Low Categories, respectively. One of the reasons target students in the High Category exhibited a smaller percentage of increase during treatment may have been the limited extent to which improvements in appropriate behavior were warranted in the High Category compared to the Middle and Low Categories. Target students in the Low Category, although improving by 17 percent during treatment, performed at a rate 11 percent below the High Category and 7 percent below the Middle Category. Based on these findings, it may be stated that target students of teachers who are more affectively skilled, according to the assessment technique used in this study, exhibited a higher percentage of appropriate behavior than target students in the other categories. As stated earlier, however, there was no substantial difference in the percentage of increase among the three categories.

In addition to the ceiling effect which may have been operating in the High Category, the comparatively high baseline scores of two target students in the Middle Category also affected the results of this study. Without exception, students who obtained the higher baseline scores evidenced smaller increases in appropriate behavior during treatment. Amount of improvement in the appropriate behavior of students during treatment, therefore, was related to the baseline levels as well as perceived teacher affective behavior. After deleting data from the four students with the highest baselines and computing the percentages of appropriate behavior improvements in each category, the mean percentages in each category were only slightly affected.

The present study sought to determine if one variable, perceived affective teacher behavior, affected the value of teacher approval. There are numerous other factors within the context of social reinforcement that may have affected the value students ascribe to teacher approval. Variations in pupil affect needs, differences in the qualitative aspects of approval, pupil selection, instructional models and schedule differences are factors that warrant further attention.

Research by Christensen (1960) seems to suggest that a preliminary assessment of the affect need of target students is essential for proper experimental control. Some students need more affective responses from their teachers; therefore, they value approval gestures that have a high affective emphasis. Other students have a greater cognitive need and, therefore, would value a different kind of approval.

A related variable that warrants attention is the type of instructional model employed in each classroom. This concern relates to the qualitative aspects of approval. The value of a teacher's approval is, to some degree, dependent upon the event or behavior being approved. In the present study, the tabulation sheets of observers indicated the type of instructional technique used daily in each class. The instructional methods in some classrooms allowed for approval to be administered for cognitive gains and social behaviors e.g., excellence on projects and tests and appropriate social interaction. In other classrooms approvals were administered for being on time, remaining in one's seat, remaining quiet, etc. Analysis of the instructional techniques in this study revealed that teachers in the High Category

conducted discussion type class sessions more frequently than teachers in the Middle and Low Categories. It is conceivable that teachers in the High Category tended to emphasize class interaction and social intercourse more than low-scoring teachers. The results of this experiment may have been affected by these differences.

Target student associations with other teachers during the day may have also affected their response to teacher approval. For example, if a target student was the object of criticism in two other classes and the object of praise in one, it is reasonable to assume that he/she would respond more favorably to the latter. In future research control measures should be initiated to minimize variation across teachers.

Teacher praise is a powerful classroom tool; however, praise is not effective with all students and, when used incorrectly, praise can yield negative results. Studies by Lawlor (1970) and Rowe (1974) help explain differential student responses to teacher praise and emphasize the wide variations in reinforcing stimuli. Rowe found that praise can have a deleterious effect on learning and increase the possibility that students will rely on external rewards. Rowe also suggests that praise can lower the quality of student responses to questions. In particular, she suggests that a longer period of time between the question posed to the student and his/her response is needed. She refers to the interval between the asking of a question and a student's response as "wait-time." Among the conclusions of Rowe's research are: Heavily praised students have less confidence in their answers; students in ghetto areas are teased frequently by other students when they are the object of teacher praise; and students who are less talented academically are likely to receive more non-pertinent teacher praise.

Non-pertinent praise, according to Lawlor (1970) is one of the most damaging types of praise. In research conducted with 191 second grade students on their ability to perform a simple task, Lawlor found that the use of praise which is not consistent with behavior results in less efficient problem solving behavior than either a no-reward condition or the use of praise which is congruent with the desired behavior.

Another serious claim against the indiscriminate use of praise is that it has a negative effect on students in minority groups. Researchers from Stanford University's School of Education (Martin, 1977) concluded that teachers have a tendency to praise minority group students more than whites and substitute teacher warmth and praise for challenging academic standards.

These studies suggest that praise be specific to the desired behavior, that it be congruent with the desired results, and that teachers evaluate their use of praise so that it is not administered indiscriminantly. In future research, it would be helpful to identify specific student behaviors during baseline and concentrate on altering only the selected behaviors during treatment. This design would minimize the use of non-pertinent praise and increase the probability that praise would be congruent with desired behaviors.

In the present study it was discovered that the magnitude of change in the approval responses of teachers was related to the teachers' perceived affective levels. Teachers in the High Category evidenced a slightly greater increase in the number of approvals during treatment than teachers in the Middle and Low Categories. Teachers in

the Low Category evidenced the smallest increase in the magnitude of approvals during treatment. This finding helps validate the affective measurement device designed for use in this study and suggests that a teacher's affective skill is related to his/her willingness to respond positively to students. It is important to emphasize, however, that the differences in magnitude were small.

A secondary research question posed by the present study was: Will target students perceive the change in teacher affective behavior during treatment and rate teachers higher on the affective post-test? The data suggest that within the Low Category the affective behavior of teachers during treatment was altered sufficiently for the students to detect and respond to the change. The average increase in post-test ratings was 26 points in the Low Category. It should be noted, however, that the average increase of 21.2 points in the Low Category was not sufficient to raise the affective rating of any teacher from the Low Category to the Middle Category. Increases in the Middle Category were minimal, with an average increase of only six points. The High Category evidenced a slight decline in post-test scores.

The degree of variation in affective post-test ratings among categories suggests that the lack of a highly accurate measurement device for determining one's level of affective functioning is, perhaps, a major deficiency of this study. A principal reason for the paucity of research in this area may be the unavailability of an accurate measuring instrument. In addition to the experimental contamination factors associated with time, settings, subject controls, and other variables, the effect of imprecise affective measurement increases the

possibility that differences in results may have been based on other teacher characteristics.

Development of an adequate affective measurement device remains a primary concern, but recent work by Aspy and Roebuck (1975) has resulted in some improvements. Carkhuff's scales for rating facilitative conditions within interpersonal relationships were used as a model by Aspy and Roebuck for construction of a scale which employs language appropriate to the classroom. According to Aspy and Roebuck, "empathy in the classroom is seen as being the teacher's understanding of the meaning to the student of the classroom experiences in which they are mutually engaged." Carkhuff's scales and the preceding definition were used by Aspy and Roebuck to develop a 5-point scale for "Understanding of Meaning." The scale can be applied to live interaction or audio and video tapes of classroom situations.

The Aspy and Roebuck scale represents a significant improvement over earlier attempts to measure empathic behavior but assessment of a teacher's affective skill remains an expression of the rater's highly subjective interpretation. Audio tapes and video tapes are subject to tests of intra-rater reliability, however, which is an important advantage of the Aspy and Roebuck scale.

The process of identifying characteristics of successful teachers and designing programs in which teachers can acquire successful traits and alter existing deficiencies remains exceedingly difficult. Indeed, a persistent theme in education literature is whether successful traits can be identified and taught to prospective teachers. Some educators contend that the process of educating teachers and defining

the successful teacher are hopeless tasks (Goheen, 1969; Jackson, 1968; Turner, 1964). Others are not so pessimistic and maintain that certain personality traits, chiefly warmth and flexibility, can be identified with good teaching and successfully taught to future teachers (Ryans, 1964).

The relationship between the quality of school experiences and student affect has been the subject of extensive investigation by Bloom (1977). Bloom identifies the latent curriculum as the school curriculum which is based on the interactions of peers within the school. The latent curriculum, according to Bloom, teaches each student who he is in relation to others and indicates each person's place in the world of people, ideas, and activities. Bloom suggests, further, that a student's school related affect and academic self-concept evolve, largely, from academic encounters in school which foster either feelings of adequacy or inadequacy. He cites research to indicate that for students who perform at the top or bottom of their classes, there is a positive relationship between school affect and school achievement. The quality of instruction, especially, the skill of the teacher in designing learning experiences appropriate to a student's level of ability may be a potent means of altering a student's school-related affect. Teacher ability to empathize and teacher willingness to use praise and other rewards are important in obtaining desired changes in student affect; however, there is increasing evidence that teacher ability to provide instruction appropriate to a student's cognitive entry behaviors is strongly related to student affect.

Bloom's work and the research of Torshen (1969) and Kifer (1973) show that by the end of primary school a student's academic

self-concept is clearly formed. It may be important to note that in the present study target students in the sixth grade tended to rate their teachers higher on the affective post-test and exhibited a higher percentage of appropriate behavior during treatment than students in the seventh and eighth grades. Although the present study was not conducted with the intention of comparing grade levels and an analysis of student achievement was not included, this finding generally supports what Bloom refers to as the tendency for early stabilization of school-related affect.

Some research (Kifer, 1973) has attempted to investigate the relationship between school experiences and mental health; however, the problems inherent in defining and measuring mental health and the difficulty of conducting longitudinal studies have slowed research efforts in this area. Data from Kifer's study and implications from the previously cited studies on school related affect and academic self-concept, however, indicate a probable relationship between the quality and type of student experiences in school and mental health. The impact of repeated school failure seems especially significant in determining a student's sense of adequacy and adjustment (Glasser, 1977). It is necessary, therefore, for students who experience chronic failure in school to compensate for their failure by experiencing success in other areas outside of the school and to dismiss, as unimportant, any negative assessment from school personnel. Anti-school attitudes are often protective devices that soften the impact of failure.

Investigations into the use of praise and the affective behavior of teachers may yield implications that extend beyond the area of

classroom behavior change--the primary focus of this study--into the development of school-related affect, academic self concept, and mental health. More definitive research which examines teacher affective behavior, student achievement, student affect, and mental health are warranted to generate more conclusive data in these areas.

Summary

Regardless of the level of a teacher's affective skill, there was minimal variation in the effectiveness of teacher approval in improving the behavior of students through the use of teacher approval. The results of this experiment suggest that students respond as well, and in some cases marginally better, to the approval of teachers who are less affectively skilled. Based on these findings, one of the more important conclusions of this research is that behavior modification strategies, utilizing teacher approval as a means of improving student behavior, can be used effectively regardless of a teacher's level of affective skill. This finding corroborates the results of numerous other studies.

The present study sought to determine if one variable, affective teacher behavior, affected the effectiveness of teacher approval. There are numerous other factors within the context of social reinforcement that may have affected the value students ascribe to teacher approval. Variations in pupil affect needs, differences in the qualitative aspects of approval, pupil selection, instructional models and schedule differences are factors that warrant further attention.

Teacher praise is a powerful classroom tool; however, it is not effective with all students and can be harmful if used indiscriminantly. Maximizing the effectiveness of teacher praise requires that praise be specific to the desired behavior, congruent with desired results, and administered discriminantly.

More definitive study of the possible relationships between affective teacher behavior, teacher praise, student affect, and student mental health is needed. Inferences from previous scientific study in this area demonstrate the need for further research.

Suggestions for Further Research

1. Examine the effectiveness of teacher approval on student social behavior as a function of student perception of teacher competency in classroom management. Teacher competency in classroom management, for the purposes of this proposed research, would be determined by the extent to which the teacher relies on management resources external to the classroom, specifically, parents and school administrators.
2. Investigate the relationship between student negative or positive affect toward school and student negative or positive affect in relation to activities unrelated to school. The research question for this proposed research is: does a student generalize feelings of adequacy or inadequacy from school related activities to activities unrelated to school?
3. Using the Aspy and Roebuck Empathy Scale to assess teacher affective behavior, examine the relationship of other student behavior variables to teacher affective behavior, e.g., student involvement and student achievement.

4. Use student assessments of a teacher's affective behavior in determining target student selection. Within each class, select the student who rates the teacher the highest and compare his/her response to teacher approval to the student who rates the teacher the lowest.
5. Using the same device for both measurements, examine student assessments of teacher affective behavior and teacher self-assessments. Examine student responses to approval in relation to the degree of agreement between student assessments and teacher self-assessments.
6. Compare the effects of teacher verbal approval and teacher administered tangible reinforcers on student behavior in relation to a teacher's perceived affective behavior.
7. Investigate student voluntary helping behaviors in relation to affective teacher behavior. The research question for this proposed study is: Will students who perceive their teachers as highly affectively skilled exhibit a greater tendency to offer voluntary assistance to these teachers than students who perceive their teachers as less affectively skilled?
8. Conduct a study of similar design to the present study with teams of teachers whose students rotate among their classes. Assess the affective skill of each teacher within each team. Examine target students' responses to different teachers within each team.

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APPENDICES

APPENDIX A

STIMULUS SITUATIONS

(VIDEO TAPED)

1. Student is noticeably upset about his/her performance on a test. Teacher explains that the test seemed to have been too difficult for the entire class. Teacher points out the areas of the test on which the student did well (approval) and suggests that after she explains the second portion of the test everyone will improve their performance. (H)
2. Student is working on a science project. The experiment involves the use of a few chemicals and some glassware. He appears to be carefully conducting the experiment but does not obtain the expected results. The teacher openly scolds him for being too careless. (L)
3. Student arrives to class on time. Teacher expresses her pleasure over the student's punctuality. (H)
4. Student is experiencing considerable difficulty while reading (oral session). Teacher responds negatively to his/her mistakes and embarrasses him in front of the class. (L)
5. Student raises his hand during a discussion. He is obviously excited about what he believes to be the correct answer. Teacher indicates that his response is not completely accurate but she praises him for that portion of his answer which is correct. (H)
6. Student: "What can I say, Mr. A? He treated me so badly. I feel silly crying in front of you . . . he really dumped me." Teacher:

"Kim, you're feeling really down on yourself and perhaps a little angry right now. I have some free time after lunch, perhaps we can talk then and you'll begin to feel better about this situation. You're a fine person and I want to remind you of that." (H)

7. Student is reading aloud in class. Teacher praises him for reading well and comments on his improvement. (H)
8. Student: "Ms. Sanders, I worked some extra math problems for today; the ones listed at the end of the chapter under the challenge section." Teacher: "That's really great, Billy, would you like to put them on the board so the class can see them? I'd like for you to." (H)
9. Student: "Mr. Wayne, I believe we should have some say as to what goes into our study of the U.S. political system. I feel frustrated when I have no voice in the matter." Teacher: "Course content is not for you to decide. Who do you think you are? The course outline has already been prepared."
10. Student: "Mr. Perrywinkle, look, I completed my map drawing and even outlined the countries. I am through early, aren't I? You know that's the first time for me." Teacher: (apparently ignores Brad's comment). (L)
11. Student: "I really liked that short story in our literature book that we had to read last night. I even read two more in the same section." Teacher: "John, I wish you would remember to close the door behind you." (L)
12. Student: "I don't understand it. I always received good marks in English before coming to your class. I am really frustrated and confused. I try but nothing seems to help." Teacher "I'm

concerned about your performance too, Jan. I have an idea that might help. If you have the time, we can talk about it after school today." (H)

13. Student who is usually one of the last to finish his assignment is excited as he tells his teacher . . . Student: "Ms. Bluer, I finished first today. Aren't you proud of me? Teacher completely ignores student and says: "Well, class, it's 12:30, time to straighten up for lunch." (L)
14. Student: "I hope you don't mind if I come back after school today and practice these problems some more." Teacher: (Looking at work completed). "Look at all of the errors you have made. No one has ever done so poorly!" (L)
15. (After first six weeks of school) Teacher: "I'd like to take this opportunity to tell all of you how proud I am of the way you have been performing. The class as a whole did real well during this first grading period. If you can think of any ways in which I might improve the operation of our class, please let me know." (H)
16. Student: "Mr. Babcock, I'd like to talk with you about John who sits behind me. He disturbs me all during this class by constantly talking. I'd like to talk with him but I am not doing too well in here and I'm concerned about my grade." Teacher: "Mary, it seems to me that the reverse is usually true." (L)
17. Student: "I finally did it, Ms. Teter, I finally told John that I did not want him looking on my paper anymore. He never does his homework and I feel like I am doing him more harm than good. It felt like a tremendous pressure is off." Teacher: "I'm glad you

worked things out, Linda. It's a great relief to be honest and open. You're feeling really good about yourself." (H)

18. Student: "Ms. Sharpe, I don't really find English exciting; in fact, I find it very hard, but I like the way you teach and I'm willing to work hard in here." Teacher: "George, I'm happy to know that you feel that way. You have been working hard in here and you should be proud of your performance." (H)

19. Student: (raises hand during class and shows teacher a pen).
"Ms. Dawson, may I borrow a pen? I am writing a report for social studies and my pen just ran out of ink. I'd like to finish the report now because I don't have much time at home to study."

"Teacher: "Certainly, John. It's good to see you working so hard during study hall since you don't have much time at home." (H)

20. Student: "Ms. Tate, I really practiced these spelling words. I feel really bad about letting my team down in class. They probably all hate me." Teacher: "There really isn't any acceptable excuse for missing some of the words you missed." (L)

21. Student: "I spent all weekend working on my math problems and, you know, I really understand them now. I left school Friday feeling really down but the work I did over the weekend paid off. I feel great now." Teacher: "Sounds like you're feeling pretty good about math now. It does require a lot of practice. If there are any problems that you can't work, try not to get too frustrated. We shall always go over them in class." (H)

22. Student: (raises hand in class) "Some of us never get a change to talk during discussions because a few people talk all the time. I

really get a little upset about this." Teacher: "You just spoke up without any difficulty." (L)

23. Student volunteers to point out Brazil on a large map before the class. Teacher criticizes his inability to find the country and states that the student was not even looking on the right continent. (L)

24. Teacher is distributing report cards. Student indicates that the grade he received in English was incorrect. Teacher replies that the grade should have been even lower and adds that neither the student's behavior in class nor his work justified the grade he received. (L)

Instructions to Students for
Rating the Video Tape

You will be shown a video tape today. The people in the video tape will be students from another middle school in Charleston and their teachers. The students and the teachers will be acting. They practiced what to say and what to do with directions from me.

There will be 24 different scenes. Each scene will show an example of a teacher reacting to a student. In some of the scenes, the teacher will listen to the student, praise the student for the work he/she is doing, or point out what the student can do to help him/herself. In some of the scenes, the teacher will not praise the students. In fact, in some scenes the teacher will criticize the student for what he/she is doing.

Your job is to look at each scene and compare your teacher to the teacher in each scene. I'll stop the video tape after each scene. You will notice an "eagle" at the end of each scene. When you see the eagle, you will know that a particular scene has ended.

Now, I want you to use the rating sheet that I have given you to rate each scene as to whether your teacher is exactly like the teacher in each scene, kinda like the the teacher in each scene, or not at all like the teacher in each scene.

I have drawn the rating scale which you will be using on the board. If you think your teacher is exactly like the teacher in the following sample scene, then you will circle the number (10) on your rating sheet. If you think your teacher is very much like the teacher

in the following sample scene but not exactly like the teacher, then you will circle an 8 or a 9. The point is: the higher number you circle, the greater the similarity between your teacher and the teacher in a particular scene. For example, if you think your teacher is not at all like the teacher in a scene, you would circle a 1 or possibly a 2. If you think your teacher is kinda like the teacher in a particular scene, then you would circle a 5 or possibly a 6. Let's do this sample scene and discuss it.

Now that we are ready to begin I want to emphasize that I want you to be very honest. Your teacher will never see your answers and, in fact, I don't even want your names. I only want your book numbers on your papers. If you have any questions during the tape, raise your hand and we'll discuss it.

RATING SCALE

<u>Scenes</u>	<u>Not at all like</u>								<u>Most like</u>	
1.	1	2	3	4	5	6	7	8	9	10
2.	1	2	3	4	5	6	7	8	9	10
3.	1	2	3	4	5	6	7	8	9	10
4.	1	2	3	4	5	6	7	8	9	10
5.	1	2	3	4	5	6	7	8	9	10
6.	1	2	3	4	5	6	7	8	9	10
7.	1	2	3	4	5	6	7	8	9	10
8.	1	2	3	4	5	6	7	8	9	10
9.	1	2	3	4	5	6	7	8	9	10
10.	1	2	3	4	5	6	7	8	9	10
11.	1	2	3	4	5	6	7	8	9	10
12.	1	2	3	4	5	6	7	8	9	10
13.	1	2	3	4	5	6	7	8	9	10
14.	1	2	3	4	5	6	7	8	9	10
15.	1	2	3	4	5	6	7	8	9	10
16.	1	2	3	4	5	6	7	8	9	10
17.	1	2	3	4	5	6	7	8	9	10
18.	1	2	3	4	5	6	7	8	9	10
19.	1	2	3	4	5	6	7	8	9	10
20.	1	2	3	4	5	6	7	8	9	10
21.	1	2	3	4	5	6	7	8	9	10
22.	1	2	3	4	5	6	7	8	9	10
23.	1	2	3	4	5	6	7	8	9	10
24.	1	2	3	4	5	6	7	8	9	10

COMMUNICATION RATING SCALE

The facilitator is a person who is living effectively himself and who discloses himself in a genuine and constructive fashion in response to others. He communicates an accurate empathic understanding and a respect for all of the feelings of other persons and guides discussions with those persons into specific feelings and experiences. He communicates confidence in what he is doing and is spontaneous and intense. In addition, while he is open and flexible in his relations with others, in his commitment to the welfare of the other person he is quite capable of active, assertive, and even confronting behavior when it is appropriate.

- 1.0 - None of these conditions are communicated to any noticeable degree in the person.
- 2.0 - Some of the conditions are communicated and some are not.
- 3.0 - All of the conditions are communicated at a minimally facilitative level.
- 4.0 - All of the conditions are communicated, and some are communicated fully.
- 5.0 - All of the conditions are fully communicated simultaneously and continually.

APPENDIX B

TABLE 6
BEHAVIOR RATING AGREEMENT FOR
EXPERIMENTER AND OBSERVERS

Observer	Minutes of Observer Time	Agreement
<u>Student Observers</u>		
1	20	96
2	20	94
3	20	88
4	20	97
5	20	96
6	20	86
7	20	87
8	20	89
9	20	96
10	20	85
11	20	98
12	20	92
*13	20	97
*14	20	88
<u>Teacher Observers</u>		
1	20	93
2	20	85
3	20	92
4	20	87
5	20	98
6	20	90
7	20	87
8	20	88

TABLE 6. Continued

Observer	Minutes of Observer Time	Agreement
9	20	85
10	20	94
11	20	96
12	20	89
*13	20	91
*14	20	87

*Alternates.

Instructions to Participating Teachers

Procedures for Selection of

Target Students

Students from Stall High School have been selected for observation of behavior. Observations are scheduled to begin either Wednesday or Thursday of this week, depending on the decision of Stall administrators. Observations will continue Monday through Friday of each week for a period of not less than eight weeks.

As previously indicated, you are asked to designate two students as "target students," i.e., students who exhibit a high degree of behavioral non-conformity in the classroom. On the form below please indicate the names of these two students according to the following guidelines:

- (1) To avoid sex variables, select only males.
- (2) For data collection purposes, select only students that are regular attenders.

No teacher's class will be observed more than 30 minutes per day. All observations will be made during the same period each day.

When observers enter your classroom for the first time, please identify the target students and seat the observers so they can easily observe the target students' behavior.

Please return this form before Wednesday afternoon. Thank you all.

Teacher's name _____

Room Number _____ Grade _____

Target Students:

1. _____

2. _____

Thank you,

Terry W. Alderman

Instructions to Participating Teachers

Implementation of Treatment

I am generally pleased with the progress of this research thus far. We have completed the first stage of the research which is referred to as the baseline period; i.e., period in which a student's behavior is sampled in the absence of treatment. Beginning Wednesday the second stage of the research, the treatment period, will begin. This is the most important phase of the research. Your role in this stage of the research will require minimal effort but it is extremely important that you perform the following tasks every day until the research is concluded:

- Treatment:
- (1) Approval of appropriate target student behaviors.
 - (2) Ignoring inappropriate target student behaviors.

Procedures: During the course of your daily teaching I ask that you approve the appropriate behavior of each target student in accordance with my instructions during yesterday's meeting. I hope it is reasonable to assume that any student, regardless of his behavior pattern and the classroom situation, can be approved for his appropriate behavior during each class period.

The method of approval you choose to use may vary. I prefer that you use a combination of individual verbal praise, verbal praise in conjunction with "touching" (hand on shoulder, etc.), and verbal praise of a target student which the class can hear.

The praise or approval gesture may be directed to both his behavior and his academic performance. I would encourage you to divide your attention between these two. For example, if a student is withdrawn and begins to participate you may approve his increased participation. If a student consistently performs below average and improves academically, you may want to praise this change. If a student is simply sitting at his desk and working quietly, you may choose to approve this. Being on time to class, being considerate of others, quietly performing assignments, etc., are all appropriate behaviors that you may want to approve.

In addition to approving appropriate behaviors I am asking that you ignore inappropriate behaviors exhibited by target students, if possible. Certainly, I do not expect that you ignore blatant infractions but lesser more discrete infractions may be ignored without disruption of the total class. My purpose in this is to structure your interactions with the target students in a manner that will enhance your image as a supportive and empathic teacher.

Terry W. Alderman

Instructions to Observers

First, let me say thank you for joining me in this research. It is extremely important to me since it represents the final stage of my doctoral work in Educational Psychology and without your support it would be impossible to conduct.

I would be pleased if I could promise you that you will find your role in this research personally rewarding. Unfortunately, before the completion of the research all of you probably will have become bored with your task of observing another's behavior. I only hope that you will persevere and maintain a high degree of conscientiousness and accuracy in your observations.

Throughout the research, I ask that you adhere to the following procedures:

1. You will be assigned to one teacher's class for the duration of the research. The teacher will give you brief instructions related to where you should sit in order to observe the target student and who you are to observe.
2. Two observers will be assigned to each class. One will observe teacher behavior and the other will observe student behavior.
3. The assessment technique which all observers will be trained in is referred to as the time interval assessment approach.
4. Because your school officials are concerned with your attendance, I am required to call in your presence or absence each day. To facilitate this roll call, I am asking that upon your arrival each morning, you sign your name on an attendance form in the guidance office.

5. Data tabulation sheets may be obtained from the guidance office when you sign in. These sheets will be used to record your observations.
6. If the student or teacher that you are asked to observe is absent, simply write in large letters ABSENT on the data tabulation form and turn the forms in as usual. I shall place a box in the guidance office where all forms may be placed each day.
7. In addition to recording your observations on the data tabulation forms you will also be asked to indicate the type of class presentation in progress the day your observe, e.g., lecture, discussion, test, study period, other. If anything unusual occurs which might render your observations unusable, such as a fire drill, you are also asked to record this on the tabulation sheet.
8. If you are unable to observe because of illness or other commitments, please let me or Ms. Penegraph know as soon as possible.

The above procedures may be regarded by some as unusually rigid, but in order for this research to be experimentally valid and reliable, they are essential. Since each of you is making personal sacrifices to assist me and since all of you are volunteers, let me indicate that I will be willing to make as many personal sacrifices to make your experiences rewarding. Hopefully, we can all meet informally on several occasions to discuss our progress.

Again, I am very appreciative of your willingness to help.

Terry W. Alderman

Student Behavior Rating Scale

<u>Behavior Category</u>	<u>Behavior Description</u>	<u>Behavior Code</u>
Task Relevant	Includes answering or asking questions (must be lesson oriented), writing when directed to do so, looking at book, hand raising, looking at teacher, etc.	<u>TR</u>
Appropriate Social Interaction	Includes talking, laughing, playing games, telling jokes, or just sitting at one's desk when students <u>have not been instructed to engage in lesson activity</u> .	<u>S</u>
Task Irrelevant	Includes just sitting at one's desk without appropriate materials, looking at non-lesson materials, gazing out of the window, looking around the room, the student, however, <u>is not distracting another student by his inattention</u> .	<u>TI</u>
Disruptive Behavior	Includes any behavior that disrupts the academic performance of another student. The following sub-categories are to be used when reporting disruptive behavior:	
	a. Motor behaviors: Getting out of seat, walking around disturbing others, gesturing without talking, throwing objects, looking at another student and distracting him, or any other disruptive movement <u>without noise</u> .	<u>M</u>
	b. Noise making: Tapping feet, clapping hands, tearing paper so as to create a disturbance, singing, laughing, yelling, talking, etc.	<u>N</u>
	c. Aggression: Hitting, pushing, shoving, pinching, slapping, striking, poking with objects, grabbing objects from another student, etc.	<u>A</u>

Teacher Behavior Rating Scale

<u>Behavior Category</u>	<u>Behavior Description</u>	<u>Behavior Code</u>
Approval	Includes praise (e.g., "That's good," "correct," "right," "fine," "okay") and nonverbal gestures (e.g., smile, head nod, pat on the back).	<u>A</u>
Target Approval	Includes any of the above stated behavioral descriptions directed toward the target student. (<u>This is the most important teacher behavior.</u>)	<u>TA</u>
Instruction	Includes anything that has to do with instructions such as writing on the board, lecturing, pointing out something on a chart, asking a content question, listening to a student's comment, checking a student's work, etc.	<u>I</u>
Neutral Attention to Appropriate Behavior	Includes looking at a student who is working, walking in an area where students are working, looking toward the class while students are working.	<u>NA</u>
Disapproval	Includes verbal reprimand, threat or penalty, sarcasm, raising voice, facial reprimand, frowns, stares, shaking head in a negative way, corporal punishment, etc.	<u>D</u>
Target Disapproval	Includes any of the above stated behavioral descriptions directed toward the target students.	<u>TD</u>
Routine Tasks	Includes making announcements, taking up money, listening to intercom, collecting lunch tickets	<u>RT</u>
Socializing	Includes any kind of interaction (e.g., talking, laughing, smiling) between teacher and student <u>which is not related to academic issues.</u>	<u>S</u>

VITA

Terry W. Alderman was born in Charleston, South Carolina in 1945. He attended public elementary and secondary schools in Charleston and graduated from Gordon H. Garrett High School in 1963. He received the Bachelor of Arts degree from the University of South Carolina, Columbia, South Carolina, in 1968. After completing his undergraduate degree he returned to Charleston and taught for two years at Gordon H. Garrett High School.

Terry Alderman was awarded an Education Professions Development Act fellowship in 1970 through the University of Tennessee. He began his graduate studies in Educational Administration and Supervision under the fellowship in the summer of 1970 and received the Master of Science degree in 1971. Terry Alderman returned to Charleston, South Carolina after completing his Master of Science degree and served as an assistant principal of a high school for two years.

In 1973, Terry Alderman returned to the University of Tennessee and enrolled in the department of Educational Psychology and Guidance. After completing his residency requirement, he returned to Charleston, South Carolina where he completed his dissertation and served as a principal, special coordinator of an alternative to suspension program, and consultant to staff development for administrator training programs, respectively.

Terry Alderman has studied extensively with William Glasser, M.D., president and founder of the Institute for Reality Therapy in Los Angeles, California. After three years of intermittent study with Dr. Glasser and

other members of the Institute, he was certified in the use of Reality Therapy in 1977.

Terry Alderman has authored journal articles on student discipline, positive alternatives to student suspensions, and administrator staff development programs. His future aspirations include authoring books and additional articles on creative discipline counseling, classroom management, and Reality Therapy. He has recently completed a Guidebook to Alternative Programs, which is being considered for publication. He is also a contributing author to a book of Reality Therapy case studies which is currently being compiled by Naomi and William Glasser.

Currently, Terry Alderman is special coordinator of an alternative to suspension program, consultant to staff development, and associate professor at the Citadel, Charleston, South Carolina.