

**CHANGING DISRUPTIVE BEHAVIOR IN THE  
CLASSROOM: A TOKEN ECONOMY**

**BY**

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CHANGING DISRUPTIVE BEHAVIOR IN  
THE CLASSROOM: A TOKEN ECONOMY

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A Research Paper  
Presented to  
the Graduate Council of  
Austin Peay State University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in Education

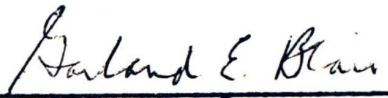
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by  
Dorothy Miller Davenport  
June, 1975




To the Graduate Council:

I am submitting herewith a Research Paper written by Dorothy Miller Davenport entitled "Changing Disruptive Behavior in the Classroom: A Token Economy." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Education, with a major in Counseling and Guidance.

  
Major Professor

Accepted for the Council:

  
Dean of the Graduate School

### ACKNOWLEDGMENTS

The author wishes to express sincere appreciation to Dr. Garland E. Blair, Professor of Psychology, Austin Peay State University, who provided support, aid and counsel during the course of study.

Very special appreciation is extended to the author's children, Peter and Susan, who endured neglect during the preparation of this study, and without whose encouragement, patience, and moral support this paper would never have been written.

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## CHAPTER I

### INTRODUCTION

The author inherited a classroom which had been together for several years. The previous year they had a very permissive teacher who allowed most anything to happen in the classroom.

There are seven target boys in this group who showed unusually high misbehavior acts, high anxiety and lack of interest.

Traditional methods of control, such as punishment, had proved unsuccessful in changing their behavior.

Student misbehavior, from minor class disruptions to criminal acts, is a constant concern to most teachers. Many teachers are actually afraid of some students, and say they are leaving the profession because of discipline problems. Realizing that teachers need practical help, not generalizations, this paper will describe a behavior modification method, token economy, that was used to change the maladaptive behavior of these seven target boys.

Behavior modification is not based on communication but has other avenues by which to reach the student. It is based on the learning theory that all behavior is learned and therefore can be unlearned.



Behavior modification, what it is, how to use it, are some of the questions in our minds. The theory behind it is behavior that is rewarded tends to be repeated; behavior that is not rewarded is not likely to be repeated. This approach is also called positive feedback, operant conditioning, reinforcement theory of learning. No matter what you call it, there are case studies to show that when it is applied correctly, it works. The United States Office of Education calls it, "an appropriate and useful tool that combines the philosophy of humanism, with its emphasis on individual worth, and the techniques of science, with its emphasis on cause/effect and objective appraisal."

### Review of the Literature

Weigum (1973) cites four criteria that should be met if punishment is to be effective in modifying behavior; it should always occur immediately after the target behavior occurs, it should be extremely aversive, and it should be unavoidable. Punishment in the schools is discussed in terms of these four requirements. It is extremely difficult to meet any or all of them in the school setting.

Thus alternatives are suggested that would meet all four criteria: electric shock, rewarding competing behavior and ignoring some behavior. The issue of bribery in positively reinforcing food behavior is mentioned. It is concluded that since schools are unable to effectively

use punishment to change behavior, they should stop using it at all and use reward exclusively.

Tinger (1973) trained the teacher of thirty-seven fourth graders in the use of token and verbal reinforcement. An experienced "token helper" demonstrated the procedures in the classroom. Introduction of a simple token system resulted in significant decreases in the disruptive behavior of ten pupils in two morning periods. When the token helper withdrew from the classroom, the teacher managed the token system and maintained disruptive behavior at lower baseline levels.

Thompson (1974) indicates that studies of the application of behavior modification to the classroom rarely report the failure rate or the degree of success relative to appropriate control groups.

In the present study, fourteen teachers were trained to use a contingency management program emphasizing the reinforcement of appropriate conduct while minimizing attention to inappropriate conduct. Changes in teacher and student behaviors from a three week baseline period to a three week period following program implementation were compared with changes in control classes over the same period. Twelve of fourteen improved dramatically. There were no reliable changes in the control group.

Winett (1973) suggests that reinforcing academic work alone will not only lead to increased productivity

but to more appropriate social behavior in the classroom. Their findings were consistent with ideas noted in R. A. Winnett and R. C. Winkler's previous review of behavior modification work which in part sharply criticized behavior modifiers for often reinforcing stillness and quietness in the classroom, as opposed to more meaningful criteria of academic improvement. In this study, ten male blacks (mean age - eleven years) in an extremely disruptive classroom were reinforced solely on the basis of their academic work. The results showed a large increase in productive work and a sharp decline in disruptive behavior.

Spencer (1973) demonstrates that teacher verbal disapproval can function as a positive social reinforcement for student inappropriate behavior. A more acceptable method is suggested for dealing with student inappropriate behavior which is the positive reinforcement of responses incompatible with the inappropriate act and the ignoring of the inappropriate act itself.

Blanchard (1973) applied several previously reported operant procedures for changing classroom behavior in a study with "behavior-problem" seventh graders. Frequency of target behaviors of the students in the class in which the operant procedure were applied was recorded. Concurrent measurement of the same behaviors was made in a second, different class procedures conducted in the usual



manner. Tangible rewards and punishments were generally effective in improving behavior. There was significant generalization of improvement resulting from the contingent administration of tangible rewards and punishments.

Stuart (1972) suggests that the traditional model of the school social worker offering individual counseling to troubled children is archaic. The first client of the education technologists is the teacher and the presenting problems of students are regarded as reasonable reactions to deficient environments. Among the techniques that are detailed are analysis of the behaviors and their antecedent and consequent conditions, positive and negative reinforcement, time out, maintenance of learned behavior and generalization of behavior to other situations.

Axelrod (1973) tested two behavior modification treatments with twenty-eight ten year old predominantly black pupils. An undesirable behavior was tabulated whenever a student disturbed a classmate or left his seat without permission. During group contingencies the numbers twenty-five - zero were listed on the blackboard. Following each undesirable behavior by any student, the teacher crossed off the highest remaining number under the responsible student's name. After each session, every student received the number of tokens corresponding to the highest remaining number under his name. Tokens were exchangeable

for a variety of reinforcements. Individual contingencies and group contingencies were equally effective in controlling misbehavior. Group contingencies also produced more nontarget behavior incompatible with academic progress.

Vaal (1972) describes attempts to decrease the unintelligible verbal responses of two fifth grade girls to their teachers. In the behavior modification process the attention of the teachers was used as the reinforcer. Analysis of the data indicates that the treatment was successful in modifying the girls' behavior.

McLaughlin (1972) used an inexpensive, easily managed token economy for one year in a normal combined fifth and sixth grade classroom with twenty-five - twenty-nine pupils. Data were collected for the entire academic performance in spelling, language, handwriting, and math for that year. During a base-line period, assignment completion was variable. Introduction of a token economy with a point exchange every five days increased assignment completion and decreased variability of performance. An application of a token economy that had a point exchange averaging four days was accompanied by an assignment completion rate that approximated one hundred per cent. A reinforcement contingency for quiet behavior rather than for assignment completion was accompanied by a marked diminution of assignment completion. A reintroduction



of the token reinforcement for assignment completion again increased that behavior.

Rosenfeld (1972) compared the number of math tests passed by sixty sixth graders with I.Q. of eighty-four to one hundred thirty-five under regular classroom reinforcement, chart reinforcement, monetary reinforcement and monetary plus chart reinforcement. There was a significant improvement for the total class and for middle I.Q. students during the monetary plus chart reinforcement. High I.Q. students improved under monetary and monetary plus chart reinforcement. Low I.Q. students showed no improvement.

Medland and Stachnik (1972) implemented a good behavior game in a fifth grade reading class consisting of two groups of fourteen students each. Game components included rules, lights (response feedback), and group consequences of extra recess and extra free time. Student opponents recorded the dependent variables which included talking-out, disruptive and out-of-seat behaviors. Results show that the game reduced the dependent measures from their baseline rate by almost ninety-nine percent of one group and ninety-seven percent for the other.

Ayllon and Roberts (1974) performed a study on eliminating discipline problems by strengthening academic performance. The A B A B design was used to evaluate the effectiveness of behavioral intervention. To strengthen competition and accuracy of students' performances a token

economy system was developed. The children earned points for effort. Points were exchanged for a wide variety of activities, privileges and priorities. Reinforcement was given during the B part of the design. All but one of the five children showed significant improvement. The same child persisted in disruption somewhat longer than did his peers.

Ferritor, Buckholdt, Hanblin, and Smith (1972) did an experiment with fourteen second and third graders on the noneffects of contingent reinforcement for attending behavior on work accomplished. The children worked one hundred arithmetic problems for twenty minutes each day on a random sample of material previously taught. Attending behavior was reinforced, accurate problems were reinforced, and both of these were reinforced during the same time.

Only when reinforcement was contingent both for attending behavior and for correct work did they find increased attending behavior, decreased disruption, along with increased average problems worked correctly, and increased accuracy.

## CHAPTER II

### METHOD

#### Subjects

The first subject was an eleven year old white male ( $S_1$ ), who had displayed a history of disruptive behavior from the first grade through the sixth grade. He had been tested and placed in a resource class for two hours each day for reading and math.

He would not remain in his seat or even in the room. When contained in the classroom, he would talk out, used profanity, steal things that belonged to other students or to the teacher. He would tear up things in the room that belonged to other students.

The second subject was an eleven year old white male ( $S_2$ ), who transferred from another school in the local system in January. He was a very small child for his age. He lived with his father and his step mother, whom he did not like. He talked about his mother who was in Anchorage, Alaska and wished to be with her.

He was belligerent and wanted to fight everyone in school with the least provocation. He was hyperactive, could not stay in his seat and did no constructive work. His Metropolitan Achievement Test scores showed he was below average in all subjects, but he had an unusual talent in art.



A conference with the principal of the school from which he transferred revealed he had shown these same disruptive behaviors at that school.

The third subject was an eleven year old white male (S<sub>3</sub>), who showed much maladaptive behavior. He would talk out in class, would not remain seated and refused to do most of his academic work.

His Metropolitan Achievement Test showed he was average in all areas. On the Lorge Thorndike I.Q. his score was one hundred and twenty seven. He made poor grades because he refused to do his assignments.

He was the younger of two children. His only sister was grown. When he skipped school one day, it was difficult for his parents to accept the fact.

The fourth subject was an eleven year old white male (S<sub>4</sub>), who was very mature for his age. His Metropolitan Achievement Tests showed him to be in the above average stanine in all areas. His Lorge Thorndike I.Q. revealed a score of one hundred and twenty-nine.

He was hyperactive, would not stay in his seat, skipped school one day, talked out incessantly, and would take things that did not belong to him. Although he came from an affluent family, he would try to get his lunch without paying for it. He was destructive with school property and that of other students.

The fifth subject was an eleven year old white male (S<sub>5</sub>), who was very disturbing to the class. He could not stay in his seat, talked-out in class, was constantly complaining that everything was wrong. He did not put forth much effort in doing his academic work. His tests showed he was an average student with average ability for a sixth grader.

The sixth subject was a twelve year old black male (S<sub>6</sub>), who had repeated the first grade. It had been recommended that he be tested for resource class but the parents refused to give permission. The Metropolitan Achievement Test showed one and two stanines in all areas.

His maladaptive behavior was high. He was untrustworthy, belligerent, a bully, he took things that did not belong to him and did practically no academic work. He would leave the room without permission and proceed to start fights in the restroom. He was destructive of school property.

The seventh subject was an eleven year old white male (S<sub>7</sub>), who had above average scores on the Metropolitan Achievement Test and an average I.Q. on the Lorge Thorndike Test. He had a record of misbehavior since the first grade. He ran away from school the previous year and was picked up by the police. He refused to do his assignments, would leave the room without permission, and would start fights in the restroom. One day he brought a cigarette



lighter and started a fire in the boys' restroom. He was also destructive with other people's things.

The stepfather was very cooperative but the mother made excuses and blamed the other children for her son's bad behavior.

### Experimental Procedure

The A B A B design was used with the seven target boys. During a two week period, a base line on disruptive behaviors of each of the seven boys was taken under the existing conditions.

The next two weeks a token economy program which consisted of the presentation of tokens to the children in the class by the teacher contingent on desirable behavior and work accomplished was introduced. A tally was taken of maladaptive behavior during this period.

Everyone who remained quiet from the time they arrived until eight fifteen and had completed their early morning assignment was presented a coupon. They were permitted to talk quietly to their neighbor but were not permitted to disturb the class.

Those who had good manners at lunch and only talked to those at their table quietly and returned to the room in an orderly manner were given a coupon.

A study period was held from two until the last bus was called which was three o'clock. Those who stayed

in their seats and worked on their assignments were presented tokens as they left for the day.

These coupons could be exchanged for a variety of activities, privileges and priorities. Included, on page fourteen, is a menu from which the children could choose to exchange for their coupons.

The next two weeks there was a return to the conventional class with no token economy and the disruptive occurrences were tallied.

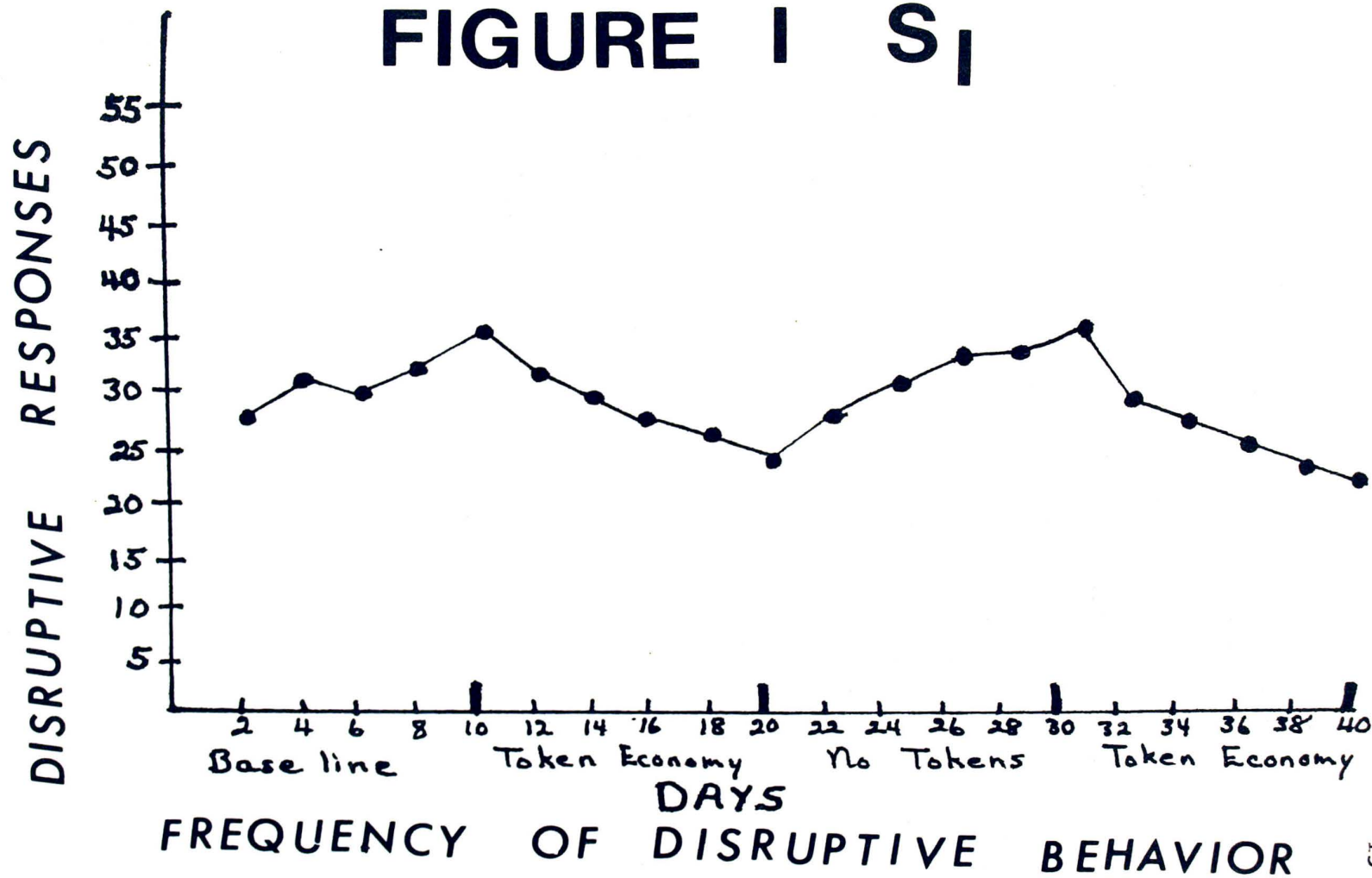
During the next two week period the token economy system was reinstated and a tally was made of disruptive occurrences.

TABLE 1

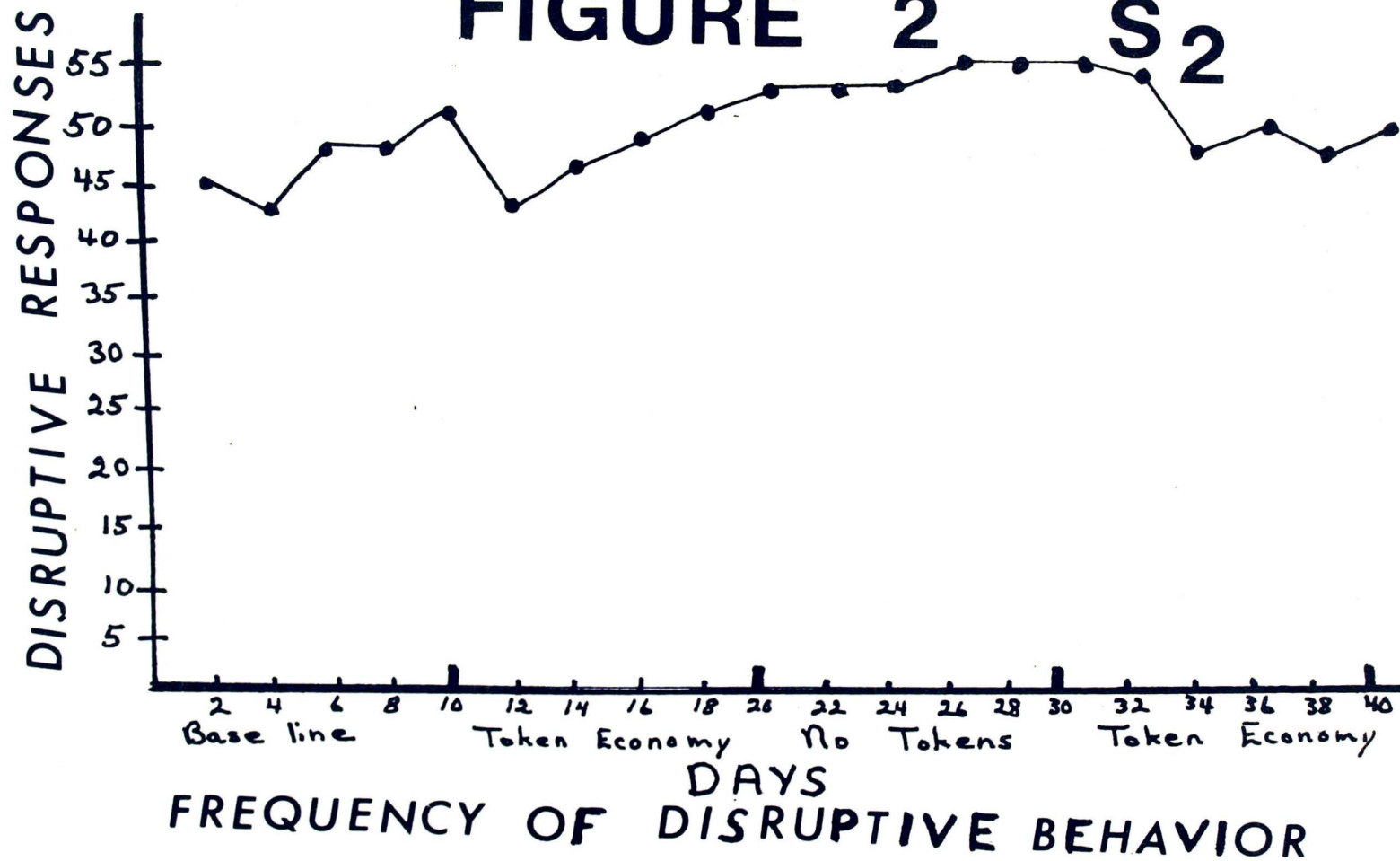
Activities, Privileges, and Priorities  
to be Exchanged for Coupons

| Item<br>No. | Menu   | No. of Coupons<br>Required |
|-------------|--|----------------------------|
| 1.          | Run an errand for the teacher                            | 1                          |
| 2.          | Wash the chalkboard                                      | 1                          |
| 3.          | Empty the waste baskets                                  | 1                          |
| 4.          | Check out film projector from the library                | 2                          |
| 5.          | Check out the film strip projector from the library.     | 2                          |
| 6.          | Turn the film strip projector                            | 4                          |
| 7.          | Read a film strip to the class                           | 5                          |
| 8.          | Fifteen minutes of free play outside                     | 10                         |
| 9.          | Candy bar  | 10                         |
| 10.         | Move desk to any desired place in the room               | 15                         |
| 11.         | Thirty minutes free time in the library                  | 10                         |
| 12.         | Make a bulletin board                                    | 10                         |
| 13.         | Tutoring first and second graders twenty minutes per day | 10                         |
| 14.         | Twenty minutes at the listening center                   | 5                          |

# FIGURE 1 S<sub>1</sub>

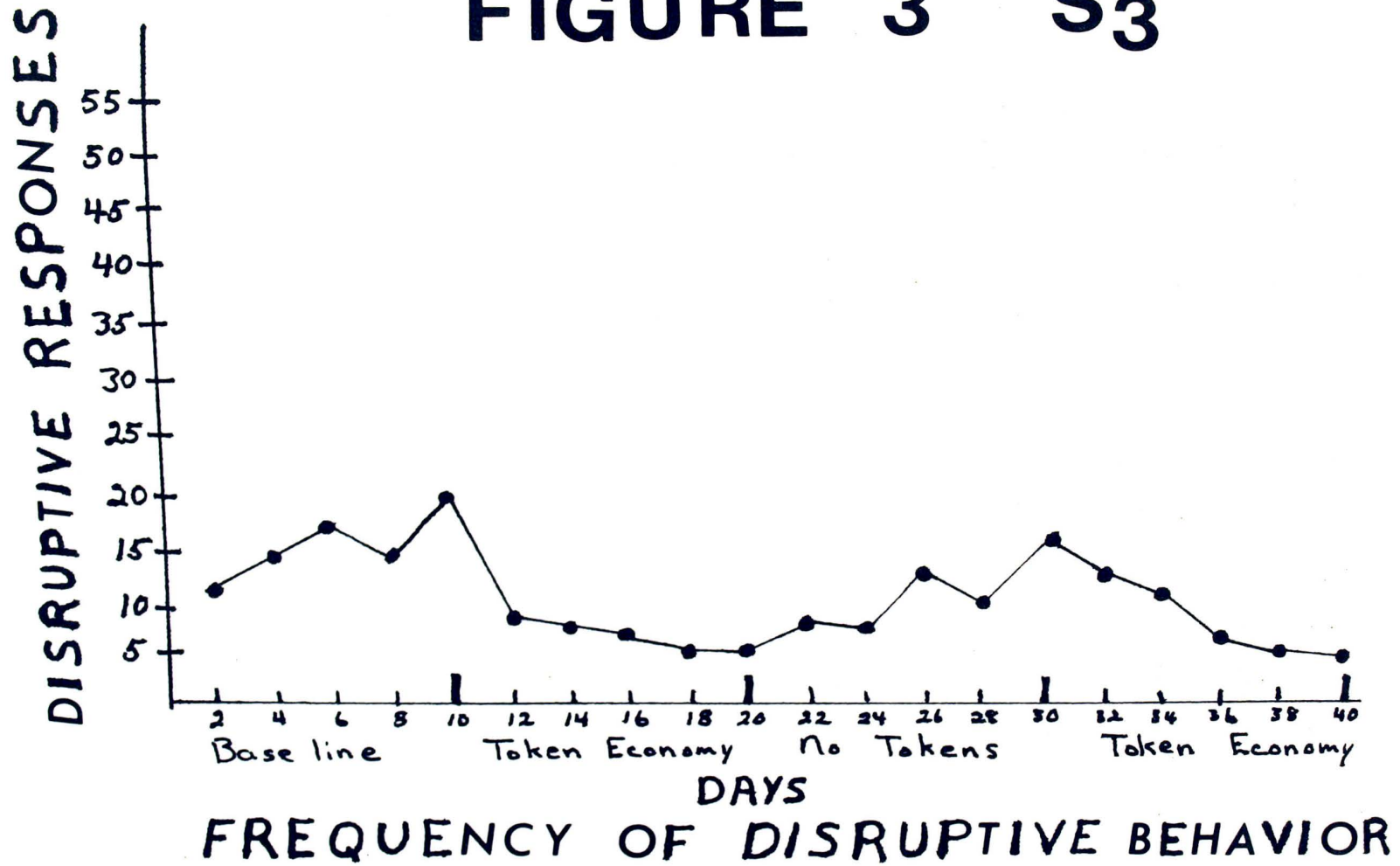


# FIGURE 2 S<sub>2</sub>

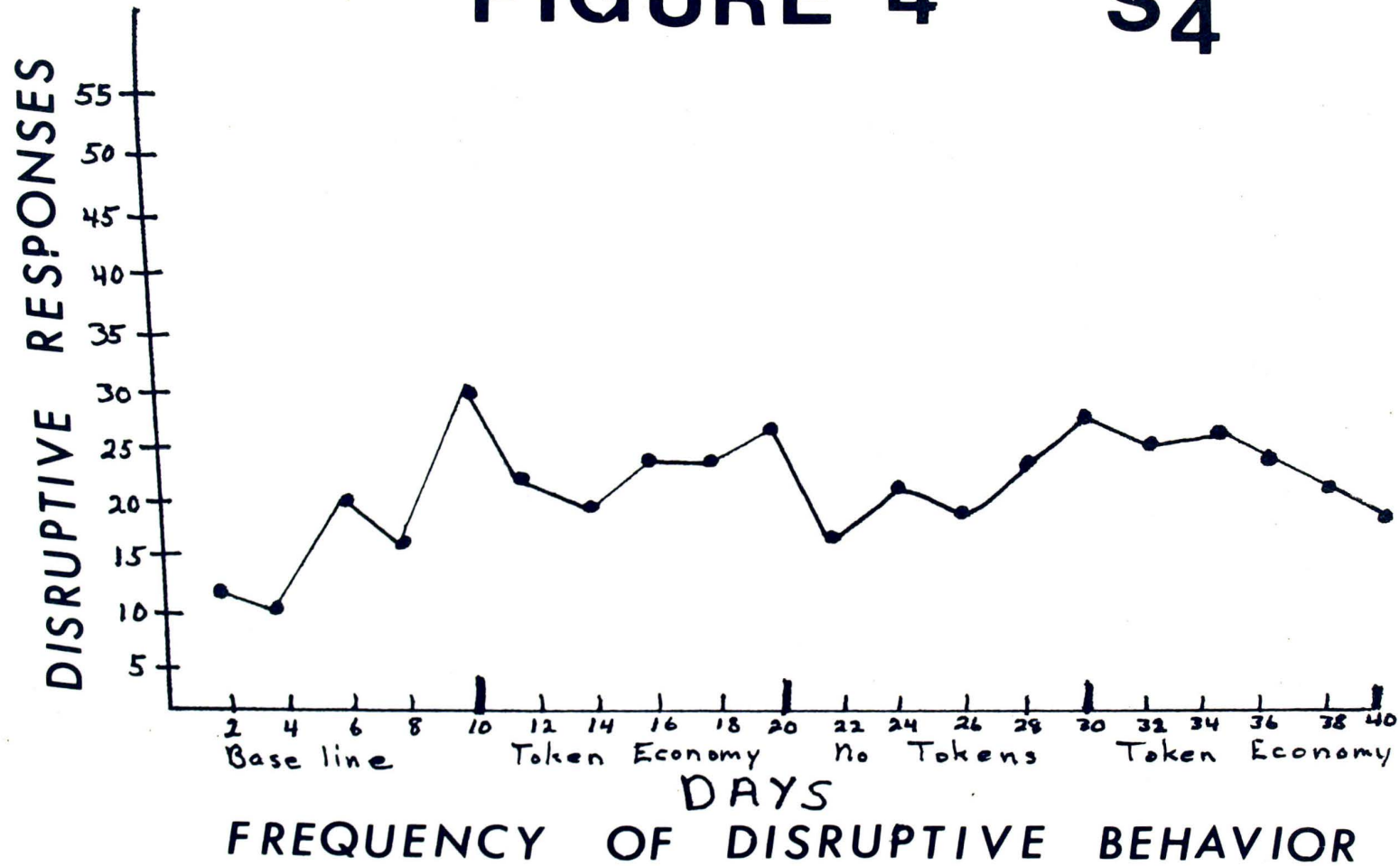




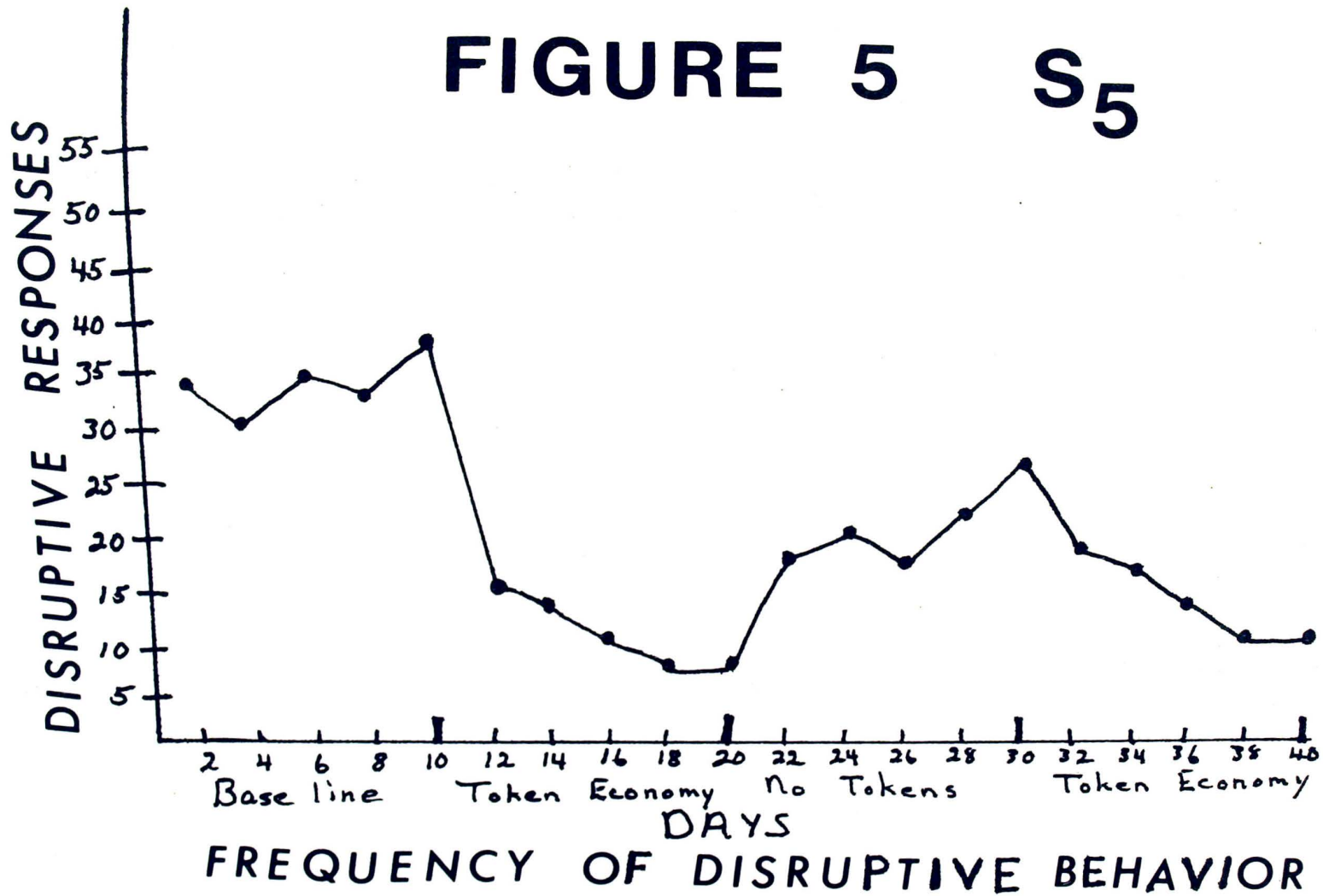
# FIGURE 3 S<sub>3</sub>



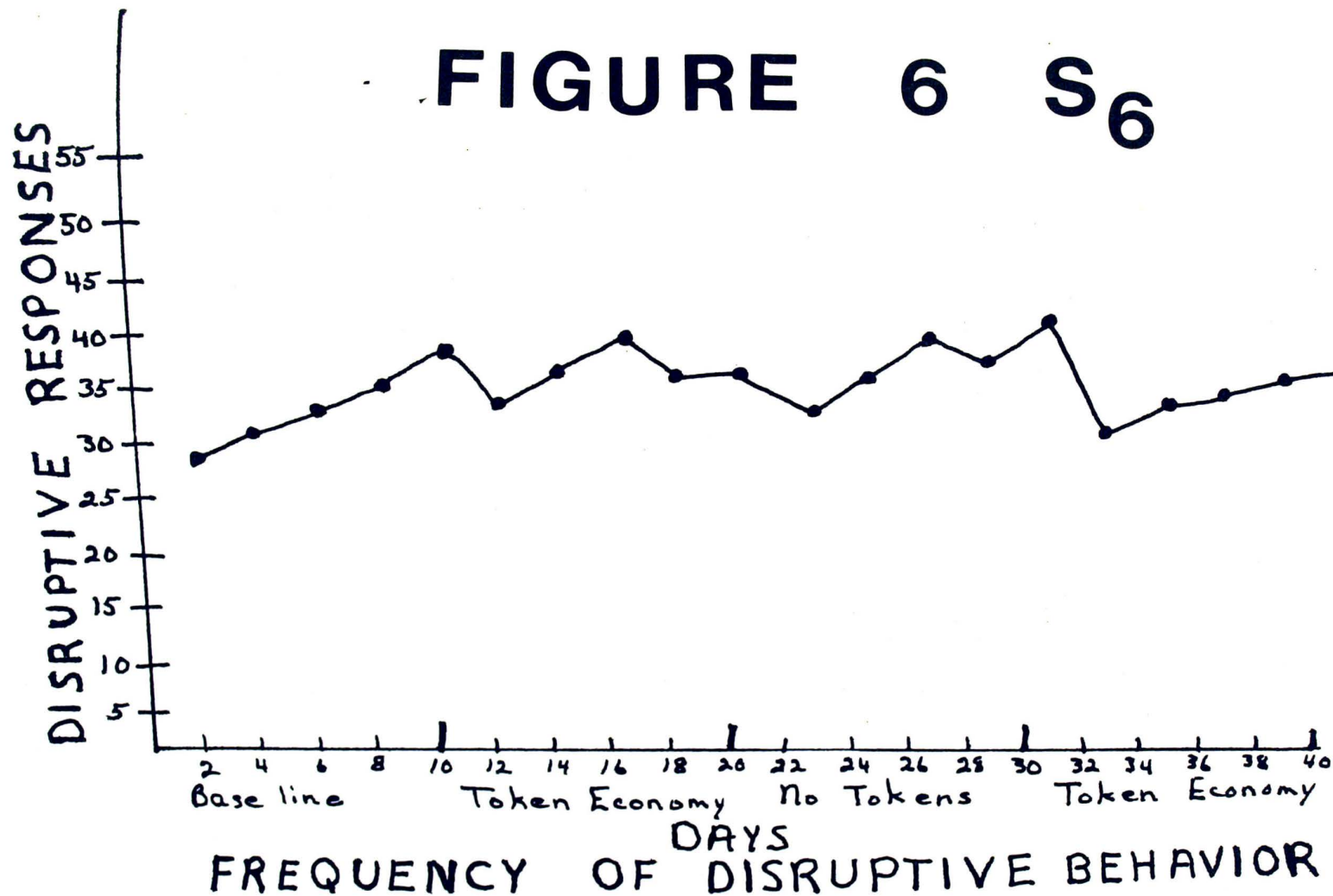
# FIGURE 4 S4



# FIGURE 5 S<sub>5</sub>

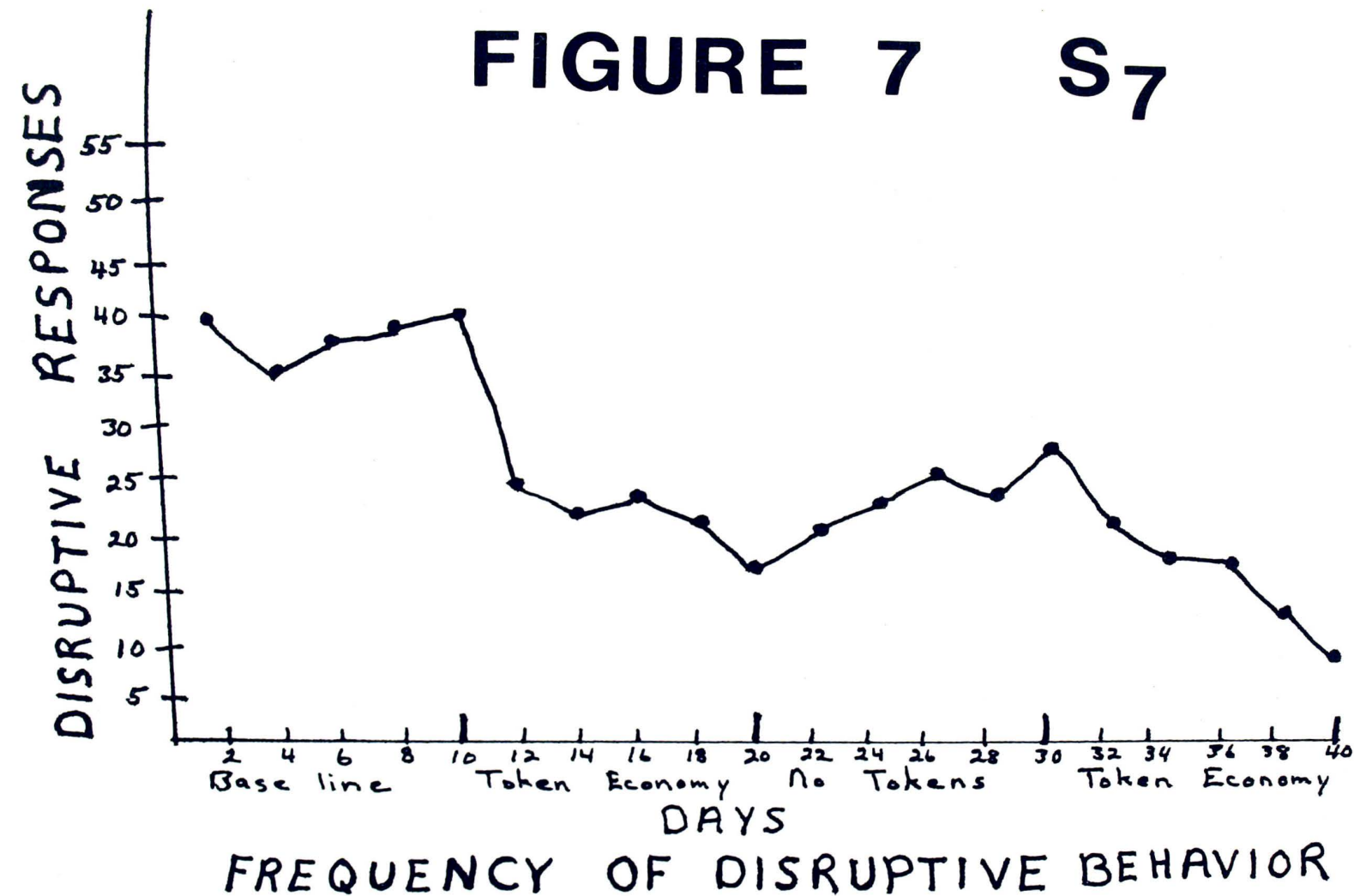


# FIGURE 6 S<sub>6</sub>





# FIGURE 7 S<sub>7</sub>



### CHAPTER III

#### RESULTS AND DISCUSSION

S<sub>1</sub> showed a definite drop in disruptive behavior during the token economy period. He became very enthusiastic about the tutoring and thus increasing his desire to earn coupons. Helping a first grader read was one of the few successful experiences that he had accomplished in the classroom. This gave him a feeling of superiority.

S<sub>2</sub> did not show any improvement during the first token economy period and very little when the token economy period was reinstated. He had so many interpersonal relationship problems that the token economy was ineffective. He would refuse to cooperate just to show the teacher he was not going to conform. This was his way of fighting back. This child had been hurt deeply. He would probably benefit from therapy. He wanted to be loved.

S<sub>3</sub> definitely showed improvement during the token economy period and it could be said this was very successful with him. His disruptive behavior was not as high as some of the others from the beginning.

S<sub>4</sub> did not improve with the token economy. He relied on stealing the coupons from the other children rather than earning them. He was a nonconformist, therefore he did not want to cooperate with the other students in any way.

Token economy was extremely successful with S<sub>5</sub>. Having something tangible was a big influence on his behavior. He could see when he had accomplished something and thrived on the coupons and the praise.

S<sub>6</sub> did not benefit from the token economy. His past history of doing nothing beneficial had become a deeply engrained habit, plus he had to maintain his status as bully of the class. This prestige was very important to him.

S<sub>7</sub> showed a definite decline in maladaptive behavior. He did not use his coupons, he hoarded them. The token economy simply served to channel him in the right direction.

From this evidence, it was concluded that token economy can and will work in many instances. No one method or technique will work with every child in every situation.

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