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## Modification of Deviant Behavior by Parents

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MODIFICATION OF DEVIANT BEHAVIOR

BY PARENTS

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A Thesis

Presented to

the Graduate Faculty

Central Washington State College

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In Partial Fulfillment

of the Requirements for the degree

Master of Education

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by

Jeanne M. Gabourie

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APPROVED FOR THE GRADUATE FACULTY

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## INTRODUCTION

Many parents are faced with the problem of dealing with deviant behavior displayed by their children in the home situation. Although most children, at some time during their childhood, display some deviant behavior the dilemma is intensified for the parents of many handicapped children. These children often display more deviant behavior than normal children. Is it possible that parents could use social reinforcement procedures to modify deviant behavior? Patterson (1967) states that social reinforcement procedures provide a powerful tool in the hands of the behavior modifier, but the modifier is continuously being outnumbered by the unknown social agents in the environment in which the deviant child lives. Patterson (1967) also theorizes that a family could provide schedules of positive reinforcement for non-adaptive social behavior. Therefore he suggests reprogramming of the social environment in which the individual lives.

Is it possible for parents to be trained to systematically apply behavior modification techniques to increase socially acceptable behavior in their own children? Although some studies have been successful in modifying social behavior, most have dealt with the child in a unique situation, such as the laboratory (Schwitzgebel and Kolb, 1964), the classroom (Zimmerman and

Zimmerman, 1962) or a nursery school (Johnston, Kelley, Harris, and Wolf, unpub.).

### The Problem

The handicapped child, like most children, displays many behaviors that are not socially acceptable to other people in his environment. Parents of normal children can usually count on these behaviors being short-lived, but because of the slower learning rate of many handicapped children, deviant behavior displayed by these children can often persist for many years. The problem is often intensified by parents not realizing they are reinforcing the very behaviors that they wish to extinguish. Several studies have shown that social behavior can be changed by the systematic application of behavior modification techniques, but the trained behavior modifier cannot be in the child's environment at all times (Williams, 1959; Bensberg, Colwell, and Cassel, 1965; Patterson, Jones, Whittier, and Wright, 1965). It was felt that further evidence was needed to determine if parents could be trained to use behavior modification techniques.

### Purpose of the Study

It is the purpose of this study (1) to determine if a child's deviant social behaviors can be effectively modified by his

own parents; and (2) to determine if parents can be trained to use behavior modification techniques in the home.

#### Definition of Terms

For the purpose of this study the terms are defined as follows:

##### Deviant Behavior

Any behavior displayed by an individual that is unacceptable to his family, peers or others in his environment. Synonymous with non-adaptive behavior.

##### Handicapped Children

Children whose development of socially acceptable behavior is deemed inadequate for their age.

##### Behavior Modification Techniques

Those techniques designed specifically to modify behavior, which have their basis in reinforcement theory. The techniques were reinforcement of an incompatible behavior, extinction and time out used in combination.

##### Behavior Modifier

A person professionally trained in the use of behavior modification techniques.

##### Non-adaptive Behavior

Any behavior displayed by an individual that is unacceptable to his family, peers or others in his environment. Synonymous with deviant behavior.

### Baseline Behavior

The rate at which a certain behavior is performed before behavior modification techniques are applied to his behavior.

### Related Research

Several studies have shown that deviant behavior can be changed by the systematic application of behavior modification techniques. Wolf, Risley, and Mees (1964) developed techniques for dealing with non-adaptive behavior problems of a hospitalized pre-school autistic boy. At nine months old the subject developed severe temper tantrums and sleeping problems. During his second year a series of eye operations made it necessary for him to wear glasses. He did not eat normally and lacked normal social and verbal behaviors. The subject was placed in a closed room each time he displayed tantrum behavior and the door was opened when the tantrum ceased. The bedtime problem was handled in a similar manner. He was put to bed with the door open. If he got up, the door was closed. If a tantrum occurred, the door was closed and opened when it ceased. The wearing of glasses had to be shaped. The subject was initially reinforced for picking up or holding the glasses, then for putting them near his face and eventually for wearing them correctly. Food was used as a reinforcer. The eating behavior was changed by removing the subject's plate for a few minutes whenever he ate with his fingers and removing the subject from the dining room if he threw food or took food from another

plate. Training of the subject's verbal behavior was accomplished by using bites of his meals for reinforcement. The subject in this study was hospitalized for over 180 days for this training to take place. Although the behavior changes did occur and the mother reported six months later that the subject was still wearing his glasses, not having tantrums and becoming increasingly verbal, a plan that involves long hospitalization and separation from the family could prove impractical for many families.

Several studies have shown successful results in changing the deviant social behavior of hospitalized or institutionalized subjects. Ayllon (1963) eliminated food stealing and hoarding of ward materials by using food withdrawal and food reinforcement with institutionalized psychotic patients as subjects. Ayllon and Michael (1959) report changes in non-adaptive behavior of mental hospital patients using nurses as behavior modifiers. The experimenter instructed the nurses in the procedure to be used, but it was the responsibility of the nurses to carry it out. Nurses in this study referred to anyone who worked on the ward including aides, attendants, psychiatric and registered nurses. There is some indication in this study that a professionally trained person does not necessarily have to serve as the behavior modifier. In this case untrained personnel were instructed and then implemented the behavior modification procedures.

In several nursery school studies teachers and aides were trained to use behavior modification in the school. Crying

after mild frustration was replaced with verbal and self-help behavior in a study with a 4 year old nursery school boy (Hart, Allen, Buell, Harris and Wolf, 1964). A 4½ year old nursery school girl who spent only about 15% of her time playing with other children was given teacher attention when interacting with other children and ignored when she was playing alone to increase her social interaction with her peer group (Allen, Hart, Buell, Harris and Wolf, 1964). One study (Harris, Johnston, Kelley and Wolf, 1964) deals with a three year old girl who spent most of her morning crawling or crouched with her face hidden. Her parents reported that this behavior had been occurring for several months whenever they took her to visit or had friends in. The teachers gave attention to the child for on-feet behavior and ignored her crawling behavior. Within a week the child had acquired a near normal pattern of on-feet behavior. In all of these studies the teachers in the nursery school were instructed by the experimenter, but it was the teachers who implemented the program for behavior change.

Several studies have been done in the laboratory. Baer (1962) reports control of thumbsucking in a laboratory situation. Risley and Wolf (1964) report a study that shows the possibility of training parents to work with their own children using behavior modification techniques. The subject was a six year old child who exhibited bizarre mannerisms and echolalia. He had no appropriate verbal behavior, lived at home and was

brought to the laboratory each week day by his mother. Pictures were presented to the subject and the subject was reinforced with ice cream for mimicking the experimenter naming the picture. After mimicking was well established prompting and fading were used to instigate appropriate verbal behavior. The experimenter would say, "Where are you going?", then prompt the subject with "out the door." Eventually the experimenter dropped the prompt and the subject would answer "out the door." The mother observed the sessions between the subject and experimenter. She was then trained to take over the job of training the child. The mother was instructed on general procedure and given the task of teaching the child to put puzzles together. A bite of ice cream was used to reinforce each successful fitting of a puzzle piece. The presentation of the reinforcer was gradually decreased until it was given only on completion of a whole puzzle. The subject learned to assemble new puzzles nearly as fast as an old one and began doing puzzles by himself during playtime. Risley and Wolf (1964) state that the explicitness and effectiveness of operant conditioning procedures enables parents to contribute significantly to the rehabilitation of their deviant children with only a minimum of training. This study indicates the possibility of training parents to effectively change their own child's behavior in the home. Although the study reports mainly on verbal training and puzzle doing, this set of parents also effectively removed chanting of phrases from the subject's behavior repertoire.

It is obvious that parents constitute a large portion of a child's social environment and that they have control over a variety of potent reinforcers. Behaviors which are followed either inadvertently or intentionally by one or more of these reinforcers will increase in frequency whether they are adaptive or disruptive. Teaching parents to observe carefully and to respond at times when adaptive behaviors appear in their child's repertoire will increase the child's chances of learning a significant number of skills. Only when a child has been observed interacting with his family can specific help be given. Following the isolation and treatment of one or more specific problems, the parents can begin to apply their skills in other areas of the child's behavior. (Terdal and Buell, 1969, p. 13)

Terdal and Buell (1969) combine training parents in the clinic with home observations and then assist the parents with setting up a program to meet the needs of the individual family. They state, "Improvement in the child's behavior will in turn reinforce the parents attempt to try new approaches and responses to their child." (p. 11)

Patterson and Reid (unpublished paper) assert that the social environment must be the primary focus of the behavior modifier who is interested in the development of intervention programs for the non-institutionalized child. They state,

Whatever the circumstances surrounding the first few stages in the acquisition of the deviant behavior, it is assumed that once the behaviors have been acquired the culture will likely provide reinforcers for their maintenance. Data from a growing series of observation studies showed that "normal" people within the child's social environment provided positive reinforcers for an astonishing array of deviant behaviors. (pp. 46-47)

They also theorize,

The immediate effect of an intervention program probably depends most upon the success of the behavior modifier

in teaching the parents or the peer group to re-arrange the contingencies which they had previously provided for deviant and adaptive social behaviors. (p. 53)

Patterson and Reid report an intervention program with a family consisting of husband, wife and six children living on a marginal income. The deviant child was a 7 year old boy. His behaviors included setting fires, disappearing from home, teasing, crying, non-compliance, aggression and destruction. Observers went into the home and instructed all members of the family in the methods of reinforcing adaptive behavior. The study shows a steady drop in the subject's use of deviant behavior in the home which was maintained at the six month follow-up investigation. Patterson (1967) asserts,

....if the parents or the peer culture provide intensive efforts to persuade, model and reinforce deviant behavior the outcome of even the most powerful treatment program may be sabotaged by the very people who initially complained about the deviant behavior. (pp. 3-4)

Patterson, Ray, and Shaw (1968) present data obtained from observations made for six boys showing deviant behavior. The study shows the effect of direct intervention in the home and school and indicates the feasibility of training parents, siblings, peers and teachers to alter behaviors of a deviant child. The deviant behaviors of all six boys included fighting, temper tantrums, hyperactivity, lack of speech, aggressiveness, stealing, lying and enuresis. Success in changing the behavior in all six cases was evident and still in effect at the six month follow-up.

By contrast to the classroom intervention procedures, the technology for family intervention is very primitive.

In addition to the limited range of problems and families investigated thus far, there are almost no data available which demonstrate persistence of effects. While the existing techniques could be applied in practical settings, it is almost certain to be the case that each investigator would find himself generating some innovation to meet the exigencies provided by each family. This then implies that for at least a few years, most of the applications are likely to be made by trained behavior modifiers who are testing and developing a new technology. For the present, the studies and data available suggest an exciting beginning and underline the vigor of the progeny which resulted from the contemporary marriage of behaviorism to clinical phenomena. (Patterson, 1969, p. 58)

Many authorities (Patterson, Ray, and Shaw, 1968; Risley and Wolf, 1964; Ayllon and Michael, 1959) agree that social behavior can be modified by the systematic use of behavior modification techniques. Many of the studies show that these techniques can be used by people who are not professionally trained behavior modifiers, if they are instructed in the use of the techniques. A review of the literature indicates a need for further study in the area of training parents to be behavior modifiers.

## METHOD

### Subject A

The subject was a four year old girl who displayed many bizarre mannerisms, eating problems, echolalia, lack of eye contact with other people, withdrawal from many situations and self destructive temper tantrums. She was one of two children in the family, the other being a seven month old boy. The father was a truck driver and the mother a housewife. The subject was enrolled in a pre-school for handicapped children. The school used behavior modification techniques for controlling the subject's temper tantrums and during periods of instruction with the subject.

### Subject B

The subject was a seven year old boy who displayed many deviant behaviors. Among them were occasional fire setting, destructiveness, sleeping problems, eating problems, seizures, and hyperactivity. The family included a 9 year old sister and an 11 year old brother. The father was a construction worker and during the study was absent from the home during the week. The mother had a 15 year old girl assisting her with the housework and the children.

### Pre-Experimental Procedures

A conference was held with both sets of parents prior to the beginning of the experiment. The deviant behaviors of the subjects

were discussed and the parents were asked to choose a behavior that they would like to change. It was suggested by the experimenter that they choose a behavior that was really troubling the family in hopes that the change in the subject's behavior would reinforce the parents enough for them to instigate changing other behaviors on their own. In both cases the parents decided to attempt to modify eating behaviors.

After the parents had chosen a behavior to modify they were given the book Living with Children (Patterson and Gullion, 1968) to read. Both sets of parents read the book before the experiment began. The experimenter discussed the procedures to be used with the parents.

#### Subject A

The father of Subject A, at this time, was eating in the living room because he said he could not stand to watch the subject eat. Mealtime presented many problems for the parents, because of the subject's table behavior. The subject put her hands on her food, stirred her food with her hands, pushed her food around and off of her plate with her hands, pushed food onto her spoon with her hands, picked food up with her fingers and placed it in her mouth, put her hand in her mouth with her spoon as she took a bite and filled her mouth with food until she gagged and spit it back on her plate.

### Subject B

The parents of Subject B described several mealtime behaviors that they considered problems. Among them were getting out of his chair, running around the table, grabbing silverware and food, taking food from other plates, putting food he did not want on other's plates, spilling water and milk and refusing to eat.

### Observation Procedures

For the first three meals of each study the subject's behavior was observed and counted by the experimenter. After each of these meals the method of counting, timing, finding rate and graphing the data was discussed with the parents. At the fourth meal the mother counted the behaviors. At the fifth meal the mother and the experimenter each counted behaviors to verify the accuracy of the mother's counting procedures. After this the count was taken by the mother with periodic checks for accuracy by the experimenter. Behaviors were counted and the rate per minute of each behavior was recorded and graphed.

### Subject A

For Subject A three behaviors were counted. They were subject putting her hand on her food, subject putting her hand in her mouth and subject assisting food to her spoon with her hand. Baseline behavior rates were taken for eight meals.

### Subject B

For Subject B only two behaviors were counted. Many of the behaviors displayed, such as running around the table, taking food from other plates and spilling food were incompatible with sitting in his chair. Eating was incompatible with refusing to eat, running around the table and grabbing silverware and food. Therefore, the behaviors that were chosen for modification were sitting in his chair and putting bites of food in his mouth. Baseline behavior rate on out of chair behavior was taken for five meals and for putting bites of food in his mouth was taken for seven meals.

### Behavior Modification Procedures

At the end of the observation period the application of behavior modification procedures was discussed with the parents. During the time that the parents were applying the procedures several meals were observed by the experimenter to verify that the procedures were being followed by the parents.

### Subject A

Application of behavior modification procedures started at the ninth meal with Subject A. As the subject often turned her head toward her father while eating, it was decided that when she put her hand in her plate he would remove the plate, hold it for 5 seconds, then replace it in front of the subject. Also anytime she placed her hand on the table beside her plate he would touch her hand and say "good girl" as a social reinforcer. At breakfast and lunch the mother would follow the same procedures.

### Subject B

Application of behavior modification procedures started with Subject B's sitting in chair behavior at the sixth meal and putting bites of food in his mouth at the eighth meal. It was decided that the mother would sit next to the subject. Every time he put a bite of food in his mouth she would touch his shoulder and say "good boy" as a reinforcer. If he left his chair he would be ignored until he returned to his chair, then the mother would reinforce this behavior in the same manner.

### Hypothesis

The following null hypothesis was formulated in this study.

There would be no significant difference in the rate of a child's behaviors before or during the use of behavior modification techniques by the parents in the home situation.

It was also hypothesized that:

If parents are successful in modifying one behavior they will use the techniques learned in the experimental situation to modify others without the assistance of the experimenter.

Fischer's Exact Probability Formula will be used for the analysis of the data and the probability will be considered significant only if  $p < .01$ .

## RESULTS

### Subject A

Figure 1 shows the rate per minute of Subject A putting her hand in her mouth. Rate was obtained by dividing the number of times the behavior was performed by the length of time spent at the table. In Figure 1, Phase I shows the seven meals at which the counting of baseline behavior took place. During this time the parents were being trained to count and record behaviors, but no attempt was being made to change the behaviors. The parents had been instructed to continue meals in as normal a manner as possible. Phase II shows the rate per minute during the application of behavior modification techniques. There is a significant decrease in the rate of performance of the behavior ( $p=.00003$ ).

Figure 2 shows the rate per minute of Subject A putting her hand on her food. Phase I indicates the rate of baseline behavior and Phase II shows the rate of behavior during the application of behavior modification techniques. Again, there is a significant decrease in the performance of the behavior ( $p=.0000000001$ ).

Figure 3 shows the rate per minute of the subject assisting food to her spoon with her hand. Phase I shows the rate of baseline behavior and Phase II indicates the rate of behavior during the application of behavior modification techniques. There is a significant decrease in the performance of the behavior ( $p=.00009$ ).

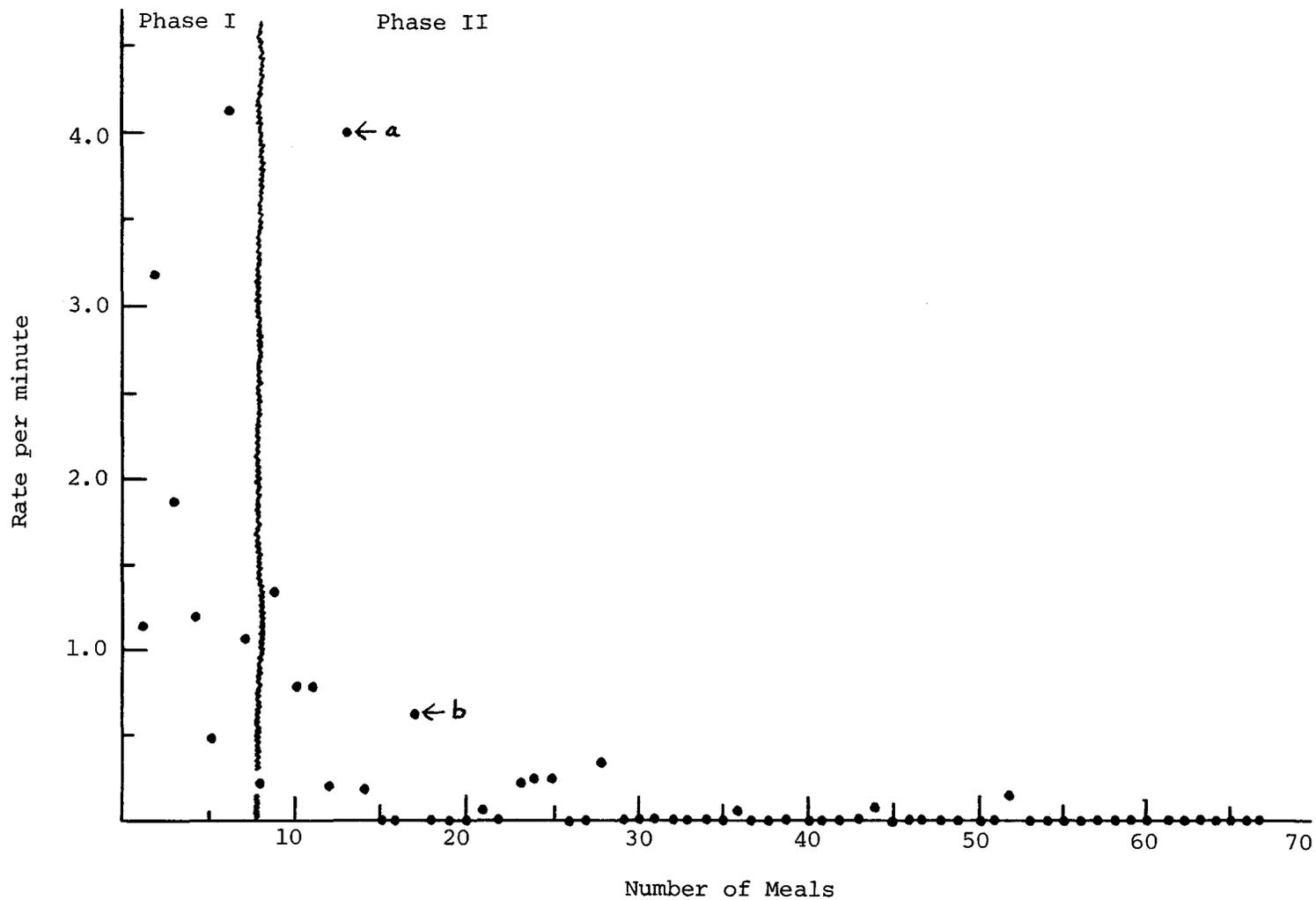


Fig. 1. The rate per minute of Subject A putting her hand in her mouth. Phase I indicates baseline behavior. Phase II shows rate of behavior during application of behavior modification procedures. Point a shows attempt to use bread. Point b indicates introduction of fork.

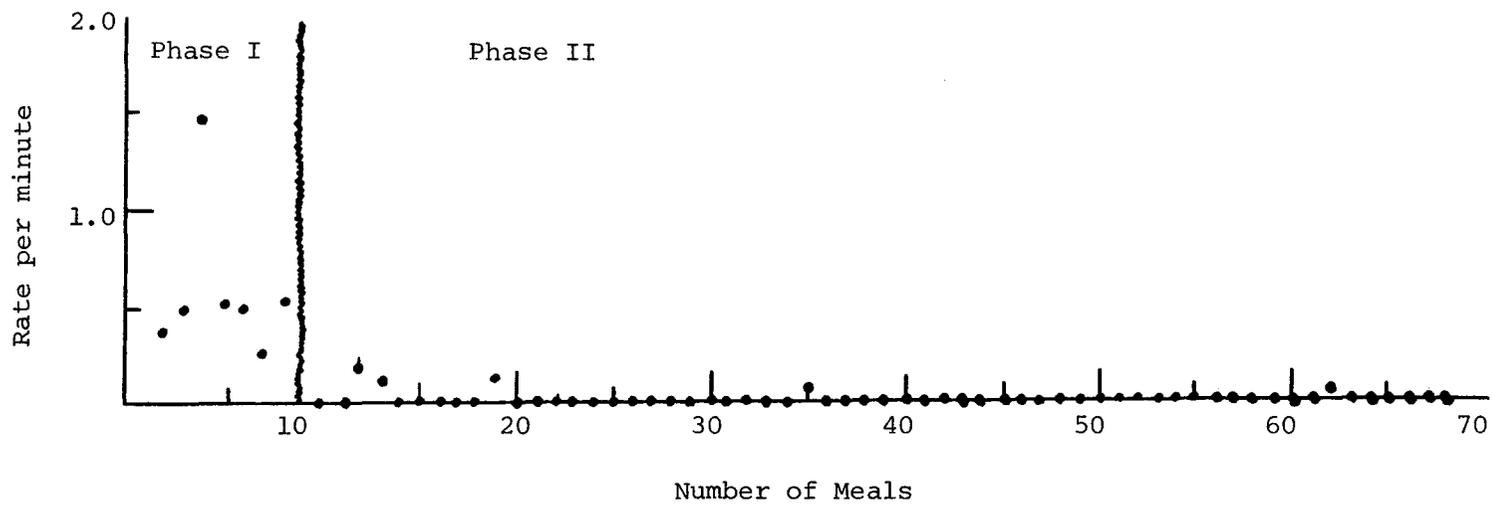


Fig. 2. The rate per minute of Subject A putting her hand on her food. Phase I indicates baseline behavior. Phase II shows rate of behavior during application of behavior modification procedures.

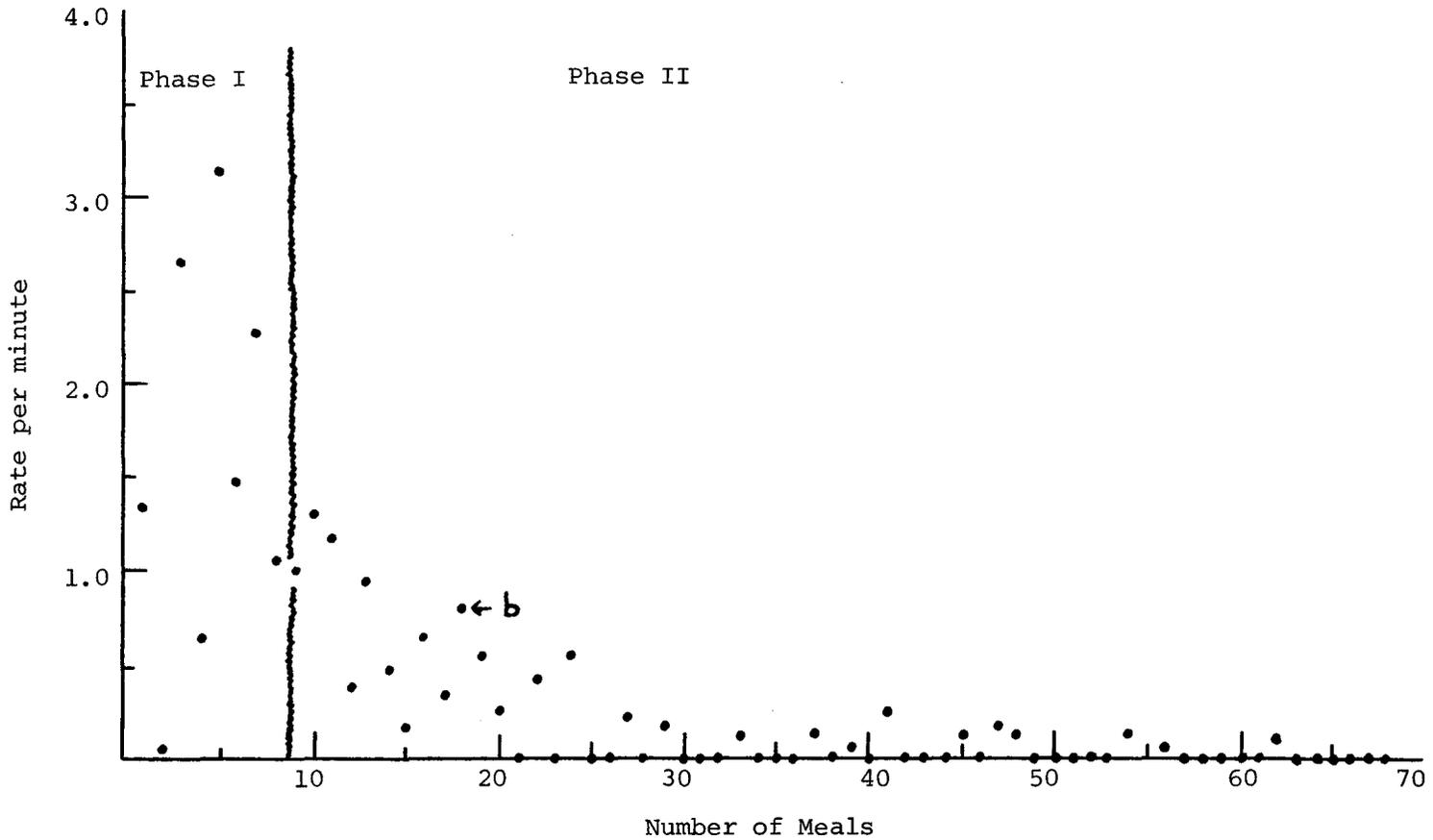


Fig. 3. The rate per minute of Subject A assisting food to her spoon with her hand. Phase I indicates baseline behavior. Phase II shows rate of behavior during application of behavior modification procedures. Point b indicates introduction of fork.

At point a in Figure 1 an unsuccessful attempt was made to give the subject a piece of bread to use to push her food onto her spoon. At point b in Figures 1 and 3 the subject's spoon was replaced with a fork. The subject pushing her fork into her food to pick up food was then reinforced to eliminate the need for pushing food onto her spoon with her hand. No data was kept on the use of the fork, but the subject continued to use a fork whenever solid food was served.

#### Subject B

Figure 4 shows the rate per minute of Subject B leaving his chair. Phase I indicates the rate of baseline behavior. Phase II shows the rate of behavior during the time that behavior modification techniques were being applied in the manner instructed by the experimenter. During Phase III the parents returned to their "normal" methods of handling the subject when he left his chair. They would either tell him to sit down, yell at him or physically return him to his chair. At the beginning of Phase IV the parents were reminded that they were to ignore the subject's behavior when he left his chair and reinforce him when he returned to it. They then returned to the behavior modification program. There is a significant difference in the performance of the behavior between Phase I (baseline) and Phase II (behavior modification program) ( $p=.00004$ ), between Phase I (baseline) and Phase IV (reinstatement of program) ( $p=.009$ ), between Phase II (behavior modification program) and Phase III (parents attending to subject when out of chair) ( $p=.000006$ ) and between

Phase III (parents attending to subject when out of chair) and Phase IV (reinstatement of program) ( $p=.002$ ). There is no significant difference between Phase I (baseline) and Phase III (parents attending to subject when out of chair) or between Phase II (behavior modification program) and Phase IV (reinstatement of program).

Figure 5 shows the rate per minute of the subject putting bites of food in his mouth. Phase I shows the rate of baseline behavior and Phase II indicates the rate of behavior during the application of behavior modification techniques. No significant difference was found in the rates.

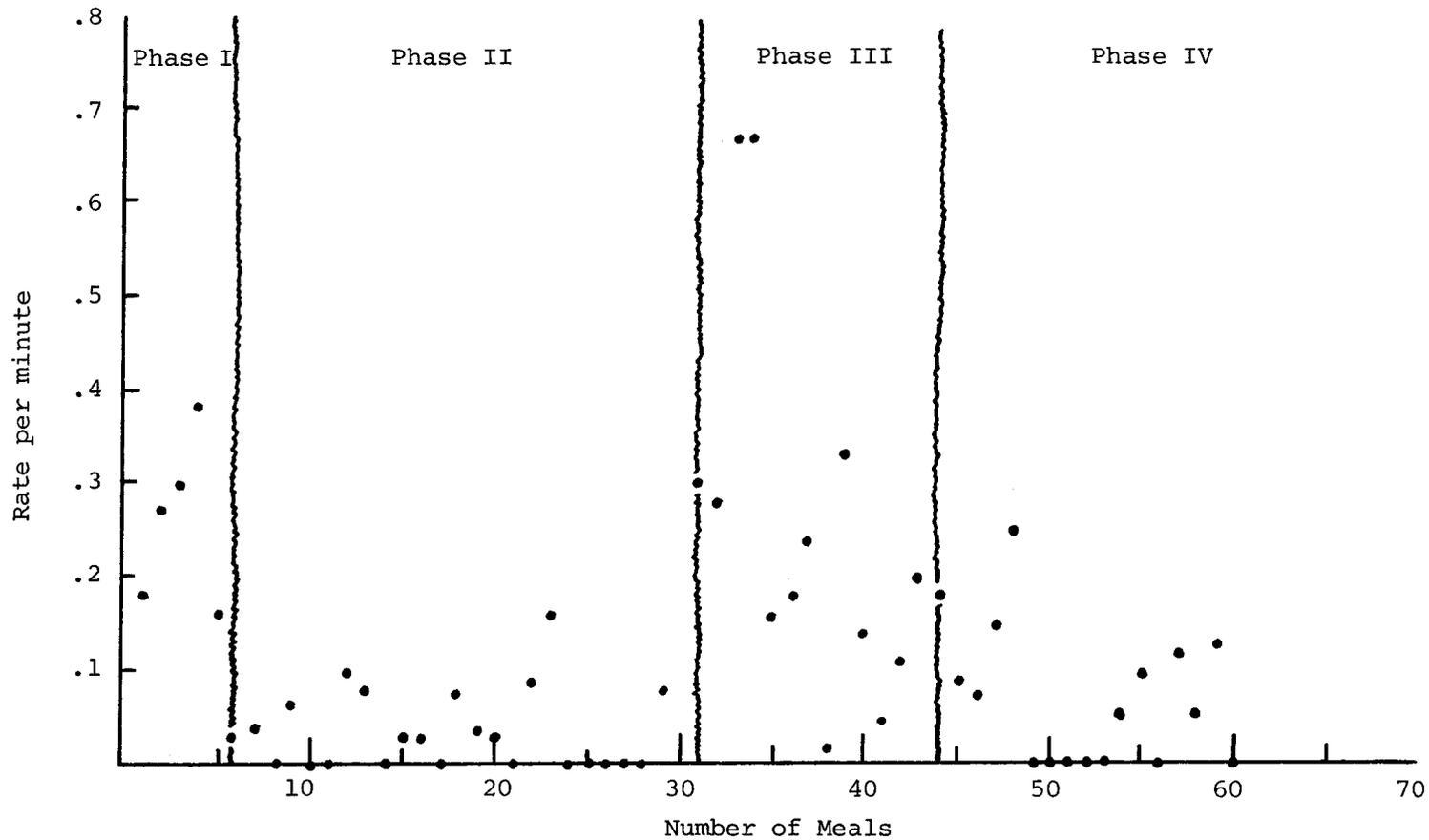


Fig. 4. The rate per minute of Subject B's out of chair behavior. Phase I indicates baseline behavior. Phase II shows rate of behavior during application of behavior modification procedures. Phase III shows rate of behavior while parents were attending to out of chair behavior. Phase IV indicates reinstatement of behavior modification procedures.

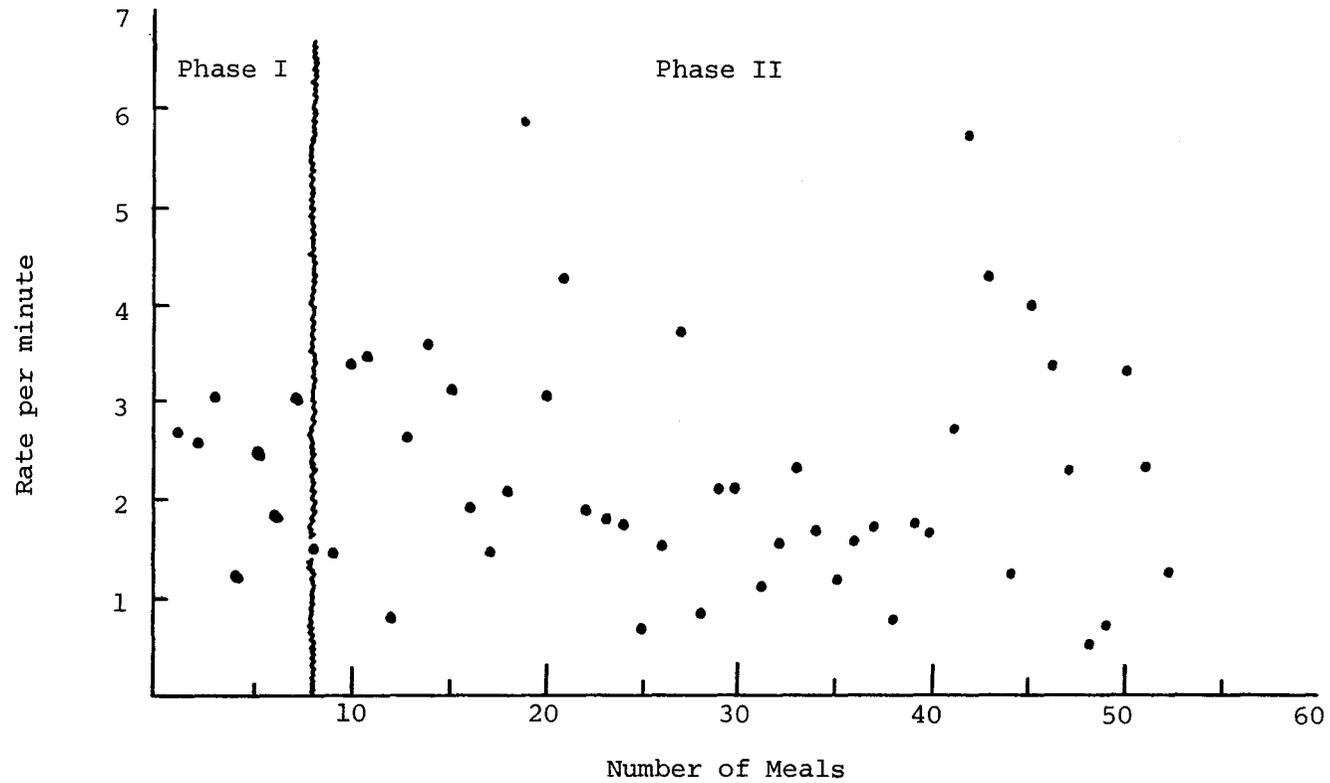


Fig. 5. The rate per minute of Subject B putting bites of food in his mouth. Phase I indicates baseline behavior. Phase II shows rate of behavior during application of behavior modification procedures.

## DISCUSSION

This study gives further evidence that parents can be trained to effectively modify their own children's behavior. It indicates that if parents are trained to use behavior modification techniques in the home they can eliminate deviant behaviors that are creating problems for their family.

### Subject A

As the study indicates, the deviant mealtime behaviors of the subject quickly and steadily decreased as behavior modification procedures were applied. After the termination of regular observations by the experimenter, several checks were made to see if the subject's behavior was maintained. The parents reported that the behaviors they had modified were still being maintained six months later.

As stated earlier the problems are often intensified by parents reinforcing behaviors they wish to change. Prior to this study the father of the subject had been verbally correcting the subject every time she displayed one of the behaviors that were modified. Attention, as the study shows, was a strong reinforcer for the subject, therefore the deviant behaviors were reinforced inadvertently by the father's attention. As he continued to verbally attend to the deviant behaviors they increased to the point where the subject would stuff food into

her mouth without swallowing and would then gag and spit the food on her plate. This behavior is the one that drove the father to the living room to eat. He returned to the table for the experiment and took an active part in applying the behavior modification procedures. By attending to the desired behaviors and ignoring the deviant behaviors the subject's behaviors were changed.

Terdal and Buell (1969) state, "Improvement in the child's behavior will in turn reinforce the parent's attempt to try new approaches and responses to their child." (p. 11) This seemed to be the case with this subject and her family. Prior to the experiment Subject A had been observed almost daily for several months by the experimenter. One of the most obvious behaviors displayed was lack of all eye contact. Although no data was kept on eye contact it was observed by the parents and the experimenter that eye contact was obtained and increased during the mealtime behavior modification procedures. This eye contact then seemed to generalize to other situations. The parents reported eye contact in the home and the experimenter observed eye contact while taking the subject for a walk. The teachers also reported eye contact at school, although it was minimal in the school situation. Perhaps the teachers were not reinforcing it as strongly as the parents and the experimenter.

As a result of the success of the experiment, the mother was encouraged to attempt control of the subject's temper tantrums using behavior modification techniques. She isolated the subject

in her bedroom whenever a tantrum started and opened the door and spoke to the subject when the tantrum ceased. At the time of the 5 month follow-up of this study, the mother reported that the subject had not had a temper tantrum for over 2 months.

Another behavior that occurred during the experiment was subject contact with the baby brother. Prior to the experiment the subject had not seemed aware of the baby. She had never been observed looking at him, speaking to him or playing with him. During the experiment she began to talk to him and would often come to the mother and tell her what the baby had said. The behavior of initiating conversation with another person was also non-existent before the experiment. All of these behaviors were reinforcing to and reinforced by the parents with attention and social praise.

In this study the subject's behaviors were successfully modified by the parents. Therefore the first hypothesis was rejected. Although the parents have reported using behavior modification techniques in other areas, they have kept no data so the second hypothesis could not be accepted. Perhaps the collection of data in the home situation is too much to expect of parents. If they can use the techniques they have learned in the daily living situation and be satisfied with the child's continuing growth toward socially acceptable behavior perhaps this is more important than data collection. Although without a record of the behavior change the parent cannot really be sure

the change has occurred. Oftentimes it may seem that a change in behavior has occurred when what has really happened is that the person observing the behavior has become accustomed to the behavior.

#### Subject B

The study indicates a significant decrease in out of chair behavior as long as the behavior modification procedures were in use. When the parents stopped using the techniques during Phase III the behavior returned to operant level. After being reminded of the agreed upon program the parents reinstated the techniques and again the behavior showed a significant decrease.

Many problems were encountered in this study. The father was away from home during the week, but did eat with the family on weekends. Although he had agreed to undertake the study he showed reluctance to fully accept any responsibility for applying behavior modification techniques. It was observed that the mother, with the assistance of the brother and sister did use behavior modification techniques during the week, but often on the weekends the whole family returned to their "normal" methods of handling the subject. These included spanking, isolation of the subject, physically returning him to the table and verbal attention when the subject was out of his chair. On the weekend before Phase III no rate was taken on Saturday. The mother reported that the father was fed up with the whole project. She said she had showed him the graphs indicating the improvement in the subject's behavior, but the father could not see any improvement. The

following week the mother continued to verbally reprimand the subject and physically return him to the table. This caused a significant increase in his out of chair behavior. The attention the subject received was reinforcing the deviant behavior. Again the parents were inadvertently reinforcing the behavior they wished to change. The following Monday the experimenter again suggested ignoring the subject when he was out of his chair and reinforcing him when he sat down. The mother then reinstated the behavior modification techniques and the subject's out of chair behavior decreased significantly.

There was no significant difference found between any of the phases in the behavior of the subject putting bites of food in his mouth. Speculation on the experimenter's part as to the cause of this would lead to the opinion that the reinforcer was not strong enough for the subject. Also it was observed that the reinforcement was not applied continuously to this behavior.

Another problem encountered in this study was the lack of time to give full attention to the subject by the mother. There were three other children at the table that required attention and this was a family that often had guests at the table. At some of the meals observed by the experimenter there were often 9 or 10 people at the table.

The variety and number of deviant behaviors displayed by the subject also presented many problems. Although the out of chair behavior decreased significantly, the subject displayed so many other seriously deviant behaviors that when this problem was

solved the parents hardly noticed it. It was felt that this is why the father said he could not see any improvement. Therefore the change in behavior did not reinforce the parents strongly enough for them to attempt modification of other behaviors. Of prime concern to behavior modifiers working with parents would be the importance of impressing on the parents that it is extremely difficult to change more than one behavior at a time. Unless parents understand this in the beginning they may feel that no change has occurred at all.

In this study the first hypothesis was rejected. The second one was also rejected. As the mother succinctly put it, "I give up!"

## SUMMARY

An attempt was made in these studies to show that children's behavior could be effectively modified by their own parents in the home situation. The subjects were a 4 year old girl and a 7 year old boy with deviant behaviors displayed at mealtimes. Baseline data were collected on the deviant behaviors. This was followed by application of behavior modification procedures by the parents. For Subject A keeping her hand on the table was reinforced and putting her hand on her food or in her mouth was extinguished. For Subject B sitting in his chair was reinforced. In both cases the reinforcements used were social praise and physical attention. The results indicated that these behaviors could be significantly changed by parents using systematic application of behavior modification techniques.

## CONCLUSIONS

Although the findings of these studies cannot necessarily be applied to all parents of handicapped children, it was felt that they might help to indicate some of the problems encountered in training parents to use a technique and lead to further study and improvement of the training techniques.

The results indicate improvement in the behaviors that were studied, but neither set of parents initiated any further study on their own. Possibly one of the important conclusions that can be drawn from the studies is that if parents are to continue application of techniques without the supervision of the experimenter they need to be reinforced by some outside source. It seems that the change in their child's behavior is not necessarily reinforcing enough to encourage continuation of the program.

The experimenter feels that further study of training and reinforcement of parents is a worthwhile project. If parents can be trained to effectively change deviant behaviors of their own children, many of the home and family problems faced by parents of handicapped children will be solved.

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