#### DOCUMENT RESUME

ED 039 297 UD 010 031

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TITLE Modification of Pre-Delinquents Classroom Behavior

with Home-Based Reinforcement.

INSTITUTION Kansas Univ., Lawrence. Bureau of Child Research.

SPONS AGENCY National Inst. of Child Health and Human

Development, Bethesda, Md.

PUB DATE Mar 70

NOTE 11p.; Paper presented at the Annual Meeting of the

American Educational Research Association,

Minneapolis, Minn., March 1970

EDRS PRICE EDRS Price MF-\$0.25 HC-\$0.65

DESCRIPTORS \*Behavior Change, \*Behavior Problems, Behavior

Rating Scales, \*Delinquency Prevention, Delinquent Behavior, Delinquent Rehabilitation, Mathematics Instruction, Motivation, \*Reinforcement, Residential Schools, Rewards, Secondary School Students, Summer

Programs, \*Teaching Techniques

IDENTIFIERS Achievement Place, Kansas

ABSTRACT

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A community-based program for youths in trouble, Achievement Place is a home-style training setting for pre-delinquents established on a token economy in which the boys earn various privileges by engaging in desirable behaviors that are seen as necessary for their eventual rehabilitation. Five pre-delinquents from Achievement Place attended a special summer school mathematics class where study behavior and rule violations were measured daily for each boy. The boys were required to take a "report card" for the teacher to mark. The teacher simply marked "yes" or "no" whether a boy had "studied the whole period" and "obeyed the class rules." All "yeses" earned privileges in the home that day but a "no" lost all privileges. Using a reversal design, it was shown that privileges dispensed remotely could significantly improve classroom performance. The study has been replicated in the public school, and the technique appears to be very effective as well as practical. (Author)

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# MODIFICATION OF PRE-DELINQUENTS' CLASSROOM BEHAVIOR WITH HOME-BASED REINFORCEMENT

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Delinquency is clearly an increasingly important social problem for which new solutions are actively being sought (President's Task Force, 1967). Recognizing the shortcomings of large, impersonal state reformatories, many people have advocated community-based programs for youths in trouble. Achievement Place is such a home-style training setting for pre-delinquents (Phillips, 1968; Phillips and Wolf, 1968; Phillips, Bailey, and Wolf, 1969) and in addition is established on a token economy (Ayllon and Azrin, 1968). That is, the boys earn various privileges (TV, snacks, allowance, etc.) by engaging in desirable behaviors that are seen as necessary for their eventual rehabilitation.

In addition to being in sufficient trouble in the community to warrant processing through the Juvenile Court, the boys who come to Achievement Place are invariably causing problems in the schools. This may range from being habitually tardy or truant, to cutting classes, to committing acts of agression in class. Once a boy comes to Achievement Place these major problems usually diminish greatly but typically the boys still do not perform well in class. They do not follow instructions, they wander around the room or stare out the windows, and in general they do not actively participate. The purpose of the first experiment was to determine if, under the most optimal conditions, their (the boys') study behavior could be improved and classroom rule violations diminished.



### EXPERIMENT I

## Method

<u>Subjects</u>. The subjects were five boys aged 11 to 15 years who had been assigned by the Juvenile Court to Achievement Place.

The experiment was carried out during the summer of 1969 in a special classroom setting at the University. The boys worked in math workbooks in a room equipped much like a regular schoolroom with desks, a blackboard, pictures on the walls and a teacher whose role it was to answer questions and grade problems. The teacher was instructed not to praise or disapprove of any behavior for the duration of the study. Adjoining the classroom was an observation booth from which trained observers recorded whether the boys were working in their workbooks or were being disruptive and/or inattentive (according to a set of detailed and reliable response definitions). A baseline of these two behaviors was taken for nine days. After this baseline with no contingencies, the boys were required by the house-parents of Achievement Place to carry a daily report card. The boys were told that the teacher would check "yes" or "no" depending upon whether a boy had "studied the whole period" and "obeyed the rules." If a boy got all "yeses" he was assured of several privileges for the remainder of the day. On the other hand, if a boy got a "no" for a class period he was told he would lose significant privileges at home for the rest of the day (snacks, TV, permission to go outdoors). To determine if it was necessary for a teacher to be precise in marking the cards, the teacher was instructed to simply mark all cards "yes" regardless of how much a boy studied or obeyed the rules.

In the next condition, the teacher began discriminating "good" from "bad" class behavior. To assure precision in marking the cards one of the observers



in the booth assigned the report card grades on the basis of objective data. A 10% level was set; more than 10% non-study or rule violations resulted in a "no" and subsequent loss of privileges at home. In the fourth condition, the boys were told they did not have to earn the privileges by doing well in school but that they did still have to take the cards. This was followed by a return to the condition where they earned privileges based on the daily report cards.

Results. As shown in Fig. 1, the first three days of the summer school the boys were perfect students, working diligently, not talking out or day dreaming. Then they began to "test" the teacher. In a few more days they became less attentive and more disruptive -- exhibiting the same behaviors that had been reported in their public school classrooms. In fact, they spent about 65% of their time talking, getting out of their seats, looking out of the window and throwing their pencils, and only 35% of their time studying. Inter-observer reliability of measures of study behavior and rule-violation behavior averaged 92%.

Fig. 1 About Here

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When the boys began carrying the daily card their study improved greatly and rule violations dropped. This did not last long, however, and both behaviors deteriorated and in two weeks study behavior was again low and rule violations high. Then, the teacher began discriminating "good" from "bad" behavior and an immediate improvement in study behavior and reduction of rule violations was seen for all boys. They studied and obeyed the rules better than 90% of the time. After two weeks of this superlative behavior the boys were told by the house-parents that they did not have to earn the privileges. Within three days with this no back-up condition in the home,



the boys were at almost a 50% level of disruptive behavior and only 25% study behavior. When they had to earn the privileges again, the excellent classroom behavior emerged once more and remained at better than 90% for the remainder of the study. The home-based reinforcement was clearly a very effective method of reinforcement for appropriate classroom behavior for these boys with long histories of school behavior problems.

#### EXPERIMENT II

The purpose of Exp. II was to determine if these same results could be obtained with one of the boys in a regular public school classroom.

Method

<u>Subject.</u> The subject was a 14 year-old boy who resided in Achievement Place and who had a long history of "active resistance" in school and was described by his teacher as "unmotivated to learn."

Procedures. An observer was sent to the youth's math class and, using the same definitions as in Exp. I, recorded study behavior for each class period. After a baseline was taken, the boy began taking the daily report card for the teacher to mark "yes" or "no" each day. As in Exp. I the youth could earn significant privileges by getting all "yeses" on the card but would lose them if the teacher indicated that he had not studied and paid attention, or if he had violated the class rules. Next, the youth was told he did not have to take the report card and that he did not have to earn the privileges by doing well in this class. Following this, he again took the daily card and earned the privileges by getting marked all "yeses."

Results. Figure 2 shows that the youth's study behavior ranged from 3-45% under baseline conditions. When he began taking the card, study



improved to approximately 90% and remained stable for over a week. When he stopped taking the card, study behavior again dropped to the low baseline level. A return to the daily card again improved study behavior but he began to "test" the teacher and on the fourth day studied only 30% of the time. As shown by the arrow in Fig. 2, the teacher marked him "no" and he lost his privileges for that day. Subsequently, study behavior improved to almost 100% and remained high for the rest of the term.

## Fig. 2 About Here

## **DISCUSSION**

In any community-based program, delinquent youths will probably attend public schools. In these cases, it may be impractical or impossible to specially train teachers in behavior modification techniques to handle class-room behavior problems. One alternative is to provide contingencies for good performance in the home itself. These studies indicate that this home-based reinforcement is indeed a practical and efficient method for modifying the classroom behavior of pre-delinquents in a foster-home setting. It is practical, in that the teachers do not require extra training nor does the procedure take up their time. They do not have to record behavior, arrange contingencies in class, or provide the youth with special materials. It is efficient in that the reinforcer, even though it is delayed, appears to be extremely powerful in controlling behavior in school. Also, the reinforcer does not cost anything extra. The reinforcers naturally available in the average home (snacks, TV, allowance, permission to go outside, etc.) may be used quite adequately.

The technique would appear to be easily applied in institutions for delinquents where they attend special classes on the grounds. In addition



the procedures may also work with delinquents on probation, living at home, if the parents were instructed in home-based reinforcement techniques. Further research is needed to determine under what other conditions these procedures may be applicable.



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## FIGURE CAPTIONS

- Fig. 1. Percent of intervals of study behavior (solid line) and rule violations (dotted lines) for all five boys under baseline and daily report card conditions.
- Fig. 2. Percent of time spent in study by one youth in public school math class under baseline and daily report card conditions.



## **FOOTNOTES**

This investigation was supported by PHS Training Grand HD 00183 from NICHD, Grant HD 03144 from NICHD and Grant MH 16609-01 from the NIMH Center for Studies of Crime and Delinquency to the Bureau of Child Research and the Department of Human Development, University of Kansas.



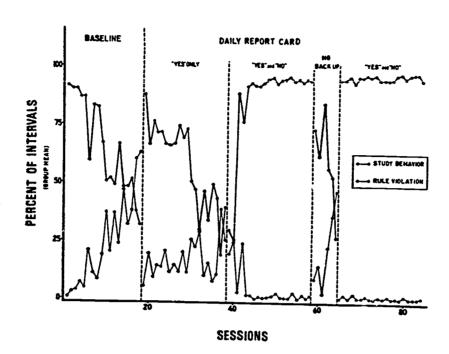


Fig. 1

