Eliminating Classroom Disturbances of Emotionally Disturbed Children by Positive Practice Procedures

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Emotionally disturbed children frequently behave in a disruptive manner in the classroom. The Positive Practice principle was evaluated as a method of eliminating such disruptions by requiring the child after a disruptive episode to engage in the positive action of asking for permission to speak out or to leave his seat. The result was that disruptive actions decreased by 95% when the practice requirement was delayed and by 98% when it was immediate. By comparison, disruptive actions were at a high level during a reminder and disapproval procedure and the disruptions were reduced by only 60% by a loss-of-recess penalty procedure. The principal advantage of the Positive Practice procedure over the alternative methods was its reeducative value as well as its greater effectiveness.

Classroom disruptions by students have been reduced by reinforcing the student for constructive behaviors (Barrish, Saunders & Wolf, 1969; Becker, Madsen, Arnold & Thomas, 1967; O'Leary & Becker, 1967; Ward & Baker, 1968; Wasik, Senn, Welch & Cooper, 1969). A second method of reducing the classroom disruptions is by showing disapproval of the individual disruptive episodes (Madsen, Becker & Thomas, 1968; Hall, Axelrod, Foundopoulos, Shellman, Campbell & Cranston, 1971; O'Leary, Kaufman, Kass & Drabman, 1970; Sailor, Guess, Rutherford & Baer, 1968). Since a teacher may not wish to use expressions of disapproval, the question arises as to the possibility of using only positive reinforcement for the child's positive actions. In studies that have attempted this total exclusion of expressions of disapproval, the teachers were observed nonetheless to use disapproval frequently (Thomas, Becker & Armstrong, 1968). Similarly, in the Token Economy procedure which was designed to emphasize positive reinforcement, token fines were still required for some disruptive behaviors such as aggression (Ayllon & Azrin, 1968). Consequently, many studies that have attempted to reduce classroom disruptions have used both procedures:

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approval for constructive behaviors and disapproval for disruptive conduct (Hall et al., 1971; Hall, Lund & Jackson, 1968; McAllister, Stachowiak, Baer & Conderman, 1969; Thomas, Nielsen, Kuypers & Becker, 1968; Wasik et al., 1969; White, Nielsen & Johnson, 1972; Zimmerman, Zimmerman & Russell, 1969). Disapproval for disruptive conduct has been exemplified by reprimanding the child (Hall, Panyan, Rabon & Broden, 1968; O'Leary et al., 1970) by time-out procedures such as loss of recess time or detention after school (Hall et al., 1971; Long & Williams, 1973; McAllister et al., 1969; O'Leary & Becker, 1967) or loss of privileges as by subtraction of tokens (Hall et al., 1971). The problem with all of these negative reinforcers is that they seem punitive in intent rather than being seen as educative. Loosely speaking, the student often feels that the primary intent of the teacher who imposes a token fine, a reprimand, or a time-out, is to make him feel bad and the teacher similarly may feel that the primary intent is to make the student feel bad.

A Positive Practice approach has been used recently as a method of reacting to disruptive conduct in a constructive manner. The Positive Practice principle states that when an error or disruptive action occurs, the individual be required to practice the correct manner of behaving. For example, in toilet training normal children, the parent reacts to an "accident" by requiring the child to practice going to the potty (Azrin & Foxx, 1974) or for retarded adults, to the toilet (Foxx & Azrin, 1973). For stealing, the thief is required to give extra items to the victim (Azrin & Wesolowski, 1974). For aggression, the aggressor is required to comfort the victim (Foxx & Azrin, 1972). For agitative conduct, a period of relaxation is required (Webster & Azrin, 1973). For stereotyped selfstimulatory behavior of retarded persons, a period of outgoing and socially responsive activity is required (Azrin, Kaplan & Foxx, 1974). All of the above problem behaviors were eliminated by using this Positive Practice principle as part of the education program. To minimize the connotation of vindictiveness of the required practice, the teacher in each instance explains to the student that the additional practice is needed only because the student had not yet learned the proper skill.

In applying this Positive Practice rationale to classroom misbehavior, it is convenient to characterize these behaviors, as Madsen et al. (1968) has done, in terms of the child speaking or shouting aloud or leaving his seat to misbehave. In order to apply the Positive Practice rationale to the problem of a raucous child constantly leaving his seat to engage in mischief, one must ask what would have been the correct form of conduct. One answer is that leaving the seat is not misconduct per se but the child should have asked for permission first. The same answer applied to the problem of a child speaking up in a class without apparent cause. The Positive Practice rationale suggests that the teacher require practice in asking for permission from a child whenever he has spoken

out of turn or left his seat without authorization. An evaluation of the Positive Practice procedure would be enhanced if the procedure could be compared with some alternative methods of dealing with these misbehaviors, such as (1) a clear statement at the start of each class of the rules regarding these acts, (2) a reminder-reprimand to the child, whenever he committed these misbehaviors, that he should not do so again, and (3) loss of a forthcoming recess period whenever he misbehaves. Accordingly, the present study evaluated the Positive Practice procedure in a special education class for children to determine the effectiveness of eliminating disruptive behavior and to compare the procedure with the other three methods.

METHOD

Pupils

The students were six boys, aged 7 to 11, averaging 8 yr, who participated in a 6-week special Summer school class. The children had been enrolled in different classes during the regular school year. Each of the students had been identified by his teacher, principal, and school psychologist as severely deficient in academic skills and extremely disruptive in the classroom and were included in the special Summer class in the hope of teaching them to behave.

Observations

The school day consisted of five periods each of 20 min duration, each of which was followed by a 10-min recess. During the class the children worked on individualized material from the Sullivan Reading and Math Series (Buchanan, 1968; Sullivan, 1968). The teacher went from child to child checking their work, commenting, praising them, and answering questions. The teacher was providing a continuing background context of reinforcement for constructive performance by this method. The teacher recorded each instance of disruptive behaviors on the clip board which she carried.

Definition of Behaviors

Disruptive behaviors were observed to occur at a sufficiently high frequency that they competed with children working on the assigned academic materials. These behaviors always involved the child talking out or being out of his seat, always without permission. Accordingly, the misbehaviors were defined for recording purposes as speaking out or leaving one's seat without permission.

Procedure

The four phases of the study were as follows: (1) Warnings, Reminders and Reinforcement, (2) Loss of Recess, (3) Positive Practice (Delayed) and (4) Positive Practice (Immediate).

Phases

Warnings, Reminders, and Reinforcement. Before each class, the teacher reminded the children that no one was allowed to talk or leave his seat without permission and that permission could be obtained by the student raising his hand and waiting for the teacher to call on him. If the child either talked out or left his seat without permission, the teacher

called the child by name and reminded him of the rules and told him, "Do not talk unless called upon," or "Do not get out of your seat without permission."

Loss of Recess. As in the Warning-Reminder procedure, the teacher announced the rule about obtaining permission at the start of each class and at each instance of an infraction of the rule. In addition, those students who broke the rule were prohibited from going outside the class during the 10 min recess period that followed each class period. They remained in the classroom during the recess and were to refrain from talking, but were given no constructive activities to perform during that time.

Positive Practice Procedure (Delayed). As in the other two procedures, the teacher announced the rule about obtaining permission at the start of each session. As in the Loss of Recess procedure, those students who broke the rule were required to remain. quietly in the classroom during the 10-min break period. During recess, they were required to engage in the following Positive Practice procedures: (1) The teacher first asked the student what the correct procedure was for talking in class or leaving one's seat. (2) The student recited the correct procedure to the teacher. (3) The student was required to raise his hand, wait until the teacher acknowledged him by name, and (4) then he asked the teacher for permission. (5) The teacher acknowledged that he had practiced correctly and then told him "Let's practice again." (6) The child repeated the entire procedure for several trials. If two students were scheduled for Positive Practice, the first student was required to remain quiet in the classroom while the other student engaged in the Positive Practice. The length of time that each student was required to engage in Positive Practice depended on how many other students were required to engage in Positive Practice during the recess period. If one or two students were scheduled, the duration was 5 min. If more than two students were scheduled, the 10 min recess period was divided equally between them. As soon as the child finished his Positive Practice, he could join the other students immediately in the recess activities, thereby providing motivation for the child to cooperate quickly. About 5-10 trials were usually performed during a 5-min period. If the student delayed or was incorrect in his performance, the teacher told him "to start all over again."

Positive Practice (Immediate). During this procedure, the Positive Practice was the same as in the previous condition except that the student began the Positive Practice immediately and completed it later when it was more convenient for the teacher. When a student broke a rule, the teacher required him to state the correct procedure for the disruptive behavior and then engage in the procedure for asking permission, but had him do so for one trial only. When the next recess was scheduled, the student practiced asking for permission for 5 min during the recess period.

"Fading" of Positive Practice. During the Positive Practice (Immediate) condition, the duration of Positive Practice was gradually reduced on successive classes, until the student was required only to recite the rule. Similarly, during the recess period, the duration of Positive Practice was decreased by half each day if the number of disruptions the previous day was two or less. For example, if a student was disruptive only once during the previous day, the amount of time he spent in Positive Practice would be 2.5 min. If he again had only one disruption the following day, the duration would be 1.25 min. If the number of disruptions exceeded two on a given day, then the duration of Positive Practice was increased to 5 min.

RESULTS

Figure 1 shows the mean number of disruptive acts per day. When the students were reminded and reprimanded for the disruptions, an average of 29 disruptions occurred per day. The penalty of losing their recess period resulted in a reduction of about 60% to about 11 disrup-

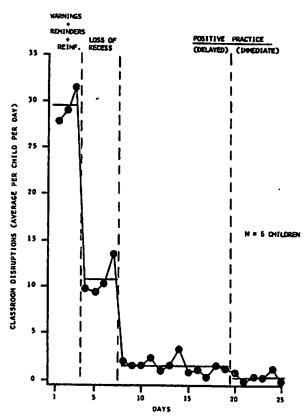


FIG. 1. Disruptive episodes by six children in a special class for children with behavior problems. The vertical dashed lines separate the four experimental procedures. The solid horizontal line for each experimental condition is the mean value for that condition. During the first condition, the teacher warned the children at the start of each class, reminded them when they misbehaved and gave praise approval as reinforcement for constructive classwork. During the "Loss of Recess" condition, the disruptive child lost his scheduled recess in addition to receiving the warnings, reminders and reinforcement. During Positive Practice the disruptive child was required to practice permission-asking during the recess period. During the Positive Practice (Immediate) condition, the child also performed one permission asking trial during the class in addition to the practice during recess. Two students were absent during the last five classes.

tions per day. The Positive Practice procedure reduced the disruptions immediately to about 2 per day, a reduction of about 95%. Under the Immediate Positive Practice procedure, the disruptions averaged about 0.4 per day, a reduction of about 98%. Because of absences from class, the data for one student was not available during the last six sessions, and for another student during the last five sessions.

A t test of statistical significance showed that the disruptions were

reduced by the "Loss of Recess" procedure (p < .05). Also, the disruptions were fewer during the Positive Practice Procedure (Delayed or Immediate) than during the Loss of Recess condition (p < .05) or the Warning-Reminder condition (p < .05). This difference was true for each of the six students. A statistical comparison between the Delayed and Immediate Positive Practice conditions was not meaningful because of the small number of students attending the final classes. Absences had been rare until the last 5 days (the Immediate Positive Practice condition) when three students were repeatedly absent. For the three students whose data was available during the final Immediate Positive Practice condition, each had fewer disruptions than during the Delayed Positive Practice condition.

Reliability. A reliability measure of detection of the disturbances was obtained by having a second observer independently record the incidents during 19 of the class periods and individual parts of each of the four conditions. Ninety-six percent agreement was obtained.

General Class Atmosphere. The initial appearance of the class during the Warning-Reminder condition was that of general chaos and confusion. Students were continuously walking and running about, hitting, talking, and shouting and interfering with the learning activities of students that did try to learn. In contrast, during the last Positive Practice procedure, the general appearance of the class was that of a relaxed but directed attention to learning and consideration for other students. None of the children were shouting or walking about. The children did often speak up and leave their seats but only after obtaining permission. Perhaps once or twice during a session, a student would talk out or leave his seat without permission but now apparently out of forgetfulness rather than the previous deliberate disregard. The brief Positive Practice that the teacher then required for a few seconds seemed to serve as a reeducative reminder to him as well as to the other students.

After the Summer session, the children returned to their regular classrooms. The special Summer class teacher instructed the teacher of each child on the use of the Positive Practice and phoned them several times during the school year regarding the child's behavior. For each of the children, the teachers consistently reported that they no longer were a problem and were behaving well.

DISCUSSION

The Positive Practice procedure was more effective than the warnings, reminders, or the loss-of-recess penalty in reducing the disruptive conduct. Nor had reinforcement for the constructive classroom activity discouraged the disruptions since the teacher was continually engaging in praising the students for their study efforts as she systematically walked from one student to the next. During the Positive Practice procedure the

disruptive incidents were a rarity and were reduced by more than 98% from their high frequency during all of the alternative procedures.

The experimental design permits the conclusion that the Positive Practice was the factor responsible for the decrease of disruptions since the other procedures provide controls for the other possible factors. Positive reinforcement for constructive activities was present equally in all of the procedures, as were also the reminders and the statement of the rules. Loss of recess (time-out from privileges) could not have been responsible for the absence of disruptions during the Positive Practice procedures since disruptions continued to occur at a high rate during the Loss-of-Recess condition. The passage of time, or some factor associated with passage of time could not be responsible since the data showed no decrease, but rather an increase, of disruption over time during the Warning-Reminder-Reinforcement condition, as well as during the Lossof-Recess condition. The instantaneous and substantial decrease of disruptions on the very first day of the Positive Practice procedure, but not before then, further shows that the passage of time was not a factor. Time-out from privileges could not be the cause of the absence of disruptions since the Loss-of-Recess condition contained an even longer duration of time-out and yet did not reduce disruptions as much as the Positive Practice.

The nature of the present population suggests that the Positive Practice procedure is applicable to children who are severe behavior problems. All of the children had been characterized as emotionally disturbed, academically deficient, hyperactive, and aggressive. Their misbehavior in the special classroom reaffirmed this characterization when the teacher relied on the existing teaching techniques of reminders, reprimands, loss of recess as a penalty, and reinforcement for constructive activities. The absence of disruptions during the Positive Practice condition indicates the usefulness of the new procedure for children with very severe conduct problems.

In the present class, only two instances occurred when the student initially refused to engage in the Positive Practice. In both cases, the teacher repeated the instruction in a neutral tone of voice, whereupon the students complied and did not refuse thereafter. The factors contributing to compliance are that the nature of the task is meaningfully related to the misbehavior, and the apparent realization that recess was obtainable only when the task was completed. When dealing with previous applications of the Positive Practice method to profoundly retarded adults who were generally resistive (Azrin & Armstrong, 1973; Azrin, Kaplan & Foxx, 1973) the instructors were obligated to use manual guidance but children who can reason clearly seem to realize the necessity and advantage of following the instructions without need for manual guidance.

The Positive Practice procedure appears to be feasible in the large normal classroom or in smaller size Special Education classes. In the Immediate Positive Practice procedure the class was interrupted only for a few seconds after each disruption while the student briefly practiced asking for permission. The teacher deferred the remainder of the practice to a later time convenient to her, the recess period, when the class had terminated. About equally effective and perhaps more feasible for some classrooms, might be the Delayed Positive Practice procedure that occurred entirely during the recess period and required no interruption of the class. No definitive conclusion can be made as to which of the two procedures, Immediate vs. Delayed Positive Practice, is more effective since so few disruptions occurred during either procedure and since the sample size was unfortunately reduced severely by the class absences. Although negative reinforcers are known to be more effective when given immediately, rather than delayed (Azrin & Holz, 1966), the administrative advantage of not interrupting the class might make the delayed procedure more desirable. This same consideration of convenience probably leads teachers to use loss-of-recess as a time-out, which is also delayed rather than immediate.

The reeducative, nonpunitive spirit of the Positive Practice procedure may be its major advantage. When a teacher invokes a penalty such as loss of recess or loss of other privileges, the reaction is viewed as a punitive desire to inconvenience the student and to cause him distress. In contrast, the spirit of the new procedure is reeducative in that the child is told in effect, "You forgot to follow the rule, so let's practice how you should have done it so you will be able to remember more easily next time."

REFERENCES

- Ayllon, T., & Azrin, N. H. The token economy: A motivational system for therapy and rehabilitation. New York: Appleton-Century-Crofts, 1968.
- Azrin, N. H., & Armstrong, P. M. The "mini-meal" A method for teaching eating skills to the profoundly retarded. *Mental Retardation*, 1973, 11, 9-13.
- Azrin, N. H., & Foxx, R. M. Toilet training in less than a day. New York: Simon & Schuster, 1974.
- Azrin, N. H., & Holz, W. C. Punishment. In Honig, W. K. (Ed.) Operant behavior: Areas of research and application. New York: Appleton-Century-Crofts, 1966.
- Azrin, N. H., Kaplan, S. J., & Foxx, R. M. Autism reversal: Eliminating stereotyped self-stimulation of retarded individuals. *American Journal of Mental Deficiency*, 1973, 78, 241-248.
- Azrin, N. H., & Wesolowski, M. D. Theft reversal: An overcorrection procedure for eliminating stealing by retarded persons. *Journal of Applied Behavior Analysis*, 1974, 7, 577-581.
- Barrish, H. H., Saunders, M., & Wolf, M. M. Good behavior game: Effects of individual contingencies for group consequences on disruptive behavior in the classroom. Journal of Applied Behavior Analysis, 1969, 2, 119-124.

- Becker, W. C., Madsen, C. H., Arnold, C. R., & Thomas, D. R. The contingent use of teacher attention and praise in reducing classroom behavior problems. *Journal of Special Education*, 1967, 1, 287-307.
- Buchanan, C. D. Programmed reading: Book 1. Sullivan Associates. New York: McGraw-Hill, 1968.
- Foxx, R. M. & Azrin, N. H. Restitution: A method of eliminating aggressive-disruptive behavior of retarded and brain damaged patients. Behaviour Research and Therapy, 1972, 10, 15-20.
- Foxx, R. M., & Azrin, N. H. Toilet training the retarded: A rapid program for day and nighttime independent toileting. Champaign, IL: Research Press, 1973.
- Hall, R. V., Axelrod, S., Foundopoulos, M., Shellman, J., Campbell, R. C., & Cranston, S. S. The effective use of punishment to modify behavior in the classroom. *Educational Technology*, 1971, 11, 24-26.
- Hall, R. V., Lund, D., & Jackson, D. Effects of teacher attention on study behavior. Journal of Applied Behavior Analysis, 1968, 1, 1-12.
- Hall, R. V., Panyan, M., Rabon, D., & Broden, M. Instructing beginning teachers in reinforcement procedures which improve classroom control. *Journal of Applied Behavior Analysis*, 1968, 1, 315–322.
- Long, J. D., & Williams, R. L. The comparative effectiveness of group and individually contingent free time with inter-city junior high school students. *Journal of Applied Behavior Analysis*, 1973, 6, 465-474.
- Madsen, C. H., Becker, W. C., & Thomas, D. R. Rules, praise, and ignoring: Elements of elementary classroom control. *Journal of Applied Behavior Analysis*, 1968, 1, 139-150.
- McAllister, L. W., Stachowiak, J. G., Baer, D. M., & Conderman, L. The application of operant conditioning techniques in a secondary school classroom. *Journal of Applied Behavior Analysis*, 1969, 2, 277-285.
- O'Leary, K. D., & Becker, W. C. Behavior modification of an adjustment class: A token reinforcement program. Exceptional Children 1967, 33, 637-642.
- O'Leary, K. D., Becker, W. C., Evans, M. B., & Saudargas, R. A. A token reinforcement program in a public school: A replication and systematic analysis. *Journal of Applied Behavior Analysis*, 1969, 2, 3-13.
- O'Leary, K. D., Kaufman, K. F., Kass, R. E., & Drabman, R. S. The effects of loud and soft reprimands on the behavior of disruptive students. Exceptional Children, 1970, 37, 145-155.
- Sailor, W., Guess, D., Rutherford, G., & Baer, D. M. Control of tantrum behavior by operant techniques during experimental verbal training. *Journal of Applied Behavior Analysis*, 1968, 1, 237-243.
- Sullivan, M. D. Programmed math: Book 1. Sullivan Associates. New York: McGraw-Hill, 1968.
- Thomas, D. R., Becker, W. C., & Armstrong, M. Production and elimination of disruptive classroom behavior by systematically varying teacher's behavior. *Journal of Applied Behavior Analysis*, 1968, 1, 35-45.
- Thomas, D. A., Nielsen, L. J., Kuypers, D. S., & Becker, W. C. Social reinforcement and remedial instruction in the elimination of a classroom behavior problem. *Journal of Special Education*, 1968, 2, 291-305.
- Ward, M. H., & Baker, B. L. Reinforcement therapy in the classroom. Journal of Applied Behavior Analysis, 1968, 1, 323-328.
- Wasik, B. H., Senn, K., Welch, R. H., & Cooper, B. R. Behavior modification with culturally deprived school children: Two case studies. *Journal of Applied Behavior Analysis*, 1969, 2, 181-194.

Webster, D. R., & Azrin, N. H. Required relaxation: A method of inhibiting agitative-disruptive behavior of retardates. Behaviour Research and Therapy, 1973, 11, 67-78.

White, G. D., Nielsen, G., & Johnson, S. M. Timeout duration and the suppression of deviant behavior in children. *Journal of Applied Behavior Analysis*, 1972, 5, 111-120.

Zimmerman, E. H., Zimmerman, J., & Russell, C. D. Differential effects of token reinforcement on instruction-following behavior in retarded students instructed as a group. *Journal of Applied Behavior Analysis*, 1969, 2, 101-112.