

*EFFECT OF THE GOOD BEHAVIOR GAME  
ON DISRUPTIVE LIBRARY BEHAVIOR*

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A modification of the good behavior game was used to reduce disruptive behaviors during a weekly library period of children in a fourth-grade class. Modifications included student input in designing rules, attempts to state rules in positive terms, observation of class behavior in the experimental (library) setting as well as in a comparison (classroom) setting, and librarian involvement in instituting the game coupled with teacher involvement in delivering reinforcers. Reinforcers consisted of special classroom activities conducted by the teacher with winning team members. Modification of the good behavior game did not detract from its effectiveness in reducing disruptive and off-task behavior.

**DESCRIPTORS:** classroom behavior, classroom management, disruptive behavior, on-task behavior, generalization

The good behavior game, a group-oriented reinforcement contingency, has frequently been used to reduce disruptive behavior in classrooms. The good behavior game involves dividing the class into teams, stating criteria for behavior, observing teams for total compliance with criteria, and reinforcing those teams totally in compliance (Barrish, Saunders, & Wolf, 1969; Darch & Thorpe, 1977; Medland & Stachnik, 1972). These studies have several characteristics in common: they took place in the regular classroom setting, used the game on a daily basis, and used rules designed without the input of the children.

The good behavior game, with several adaptations, was used to decrease disruptive behavior in a library setting. Adaptations included involving students in rule definition and stating rules positively in terms of what students should do. In addition, the regular classroom teacher de-

livered reinforcers although the librarian implemented the game.

## METHOD

### *Subjects*

All 25 students in a fourth-grade class at a suburban North Carolina elementary school participated in the study. The school librarian referred this class to the school psychologist as being highly disruptive during weekly library sessions. Informal observation by the school psychologist confirmed that this class was noticeably more disruptive than other classes using the library.

### *Observation*

The observational system consisted of three comprehensive and mutually exclusive categories: task-relevant behavior, off-task behavior, and disruptive behavior. These categories are an adaptation of those described by Thomas, Becker, and Armstrong (1968) and by Williams and Anandam (1973).

*Task-relevant.* Includes answering or asking lesson-oriented questions, writing when re-

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quested, looking at a book when requested, raising one's hand to get the teacher's attention, looking at the teacher when the teacher is lecturing, sitting at one's desk when students have not been instructed either to engage in a lesson or to choose a library book and begin reading, and any other behavior that is consistent with the ongoing lesson activity.

*Off-task.* Includes sitting without appropriate materials, looking at nonlesson materials (in the regular classroom), gazing out the window, flipping pages of a book without looking at the book, and looking around the classroom or library after assignments have been made. The student, however, is not distracting another child by his or her inattention.

*Disruptive.* Includes any behavior that disrupts the academic performance or library activity of another student including motor activities, noisemaking, verbalization, or aggression.

In order to compare class behavior in both library and classroom settings, the school psychologist observed the class during half-hour Wednesday morning library periods and during half-hour periods each Wednesday afternoon while the children were in their regular classroom. The classroom activity usually involved social studies seatwork.

At the end of every 2-min interval in the library, the observer looked across each of the three groupings of the room, from left to right, and tallied the number of children exhibiting each target behavior. In the regular classroom, children sat at one of four tables which were arranged from the front to the back of the room. At the end of every 2-min interval in the regular classroom, the children were observed in counterclockwise order, starting with the front table and ending with the back table, and the number of children exhibiting each target behavior was tallied.

To obtain observer agreement information, a second person simultaneously but independently observed once during each of the four phases of the study. Within an interval, both observers had to agree on the exact number of children

displaying each target behavior in order for the interval to be scored as an agreement. Percentage of overall agreement between the two observers (number of agreements  $\times$  100, divided by number of agreements + number of disagreements) was always above 90% in both settings. Agreement on the number of children exhibiting task-relevant behavior averaged 85% in the library and 92% in the classroom. Agreement on off-task behavior averaged over 93% in both settings. Agreement on disruptive behavior averaged 89% in the library and was always 100% in the classroom.

In addition, the observer and the librarian recorded whether each team had been following the good behavior game rules once during each intervention condition. Both the librarian and observer looked from left to right across the library at synchronized intervals four times during a period and noted any violation of rules. Interrater agreement, computed on the four recordings per period, was 100% under all conditions.

### *Procedure*

After a stable rate of behavior had been observed under baseline conditions, the good behavior game was introduced to the class by the librarian. She explained that it appeared necessary that the library behavior of the class change in order for everyone to make better use of library facilities. To help change class behavior, a game would be played involving rules, teams, and rewards. She and the class would decide together what rules were necessary for both parties to be satisfied with class behavior. Team membership would be based on random selection. When the game was in session, the librarian would look up several times during the library period and award a team point if the behavior of each member of that team was in accord with the rules. If anyone on the team was not obeying the rules, no point would be given. To win the game, a team would need to earn three out of four possible points. If both teams earned three points, both teams could

win. The reinforcer was a special activity for the children conducted by their regular classroom teacher during Wednesday afternoons. If a team did not win, the team members would continue with their regular academic activity.

The rules decided upon by the children and the librarian were the following: (a) If you talk, talk quietly. (b) Choose a library book or look at library materials during the library period. (c) When walking, be very careful not to shock one another. (Walking on the library carpet was conducive to electrical shocks.) (d) Treat one another with respect at all times being careful not to push or fight.

During the experimental condition, the reinforcer was made available in the regular classroom during the last 10 min of the afternoon. The winning team(s) could choose between two reinforcers: working with their regular teacher on a special art project or having her read a story to them.

#### *Experimental Phases*

Data were recorded each Wednesday during both library and classroom periods for 13 wk out of a period of 3½ mo. One week of school vacation separated baseline from the beginning of the first intervention condition.

Intervention A consisted of three consecutive weeks during which the entire game, including teams, rules, and reinforcement, was in effect during library periods. Reinforcers, if earned, were delivered that afternoon while the children were in their regular classroom.

During Intervention B, lasting two consecutive weeks, the game was in effect but no reinforcement was delivered by the classroom teacher. The regular classroom was not observed during the second week because school was dismissed early for parent-teacher conferences. The librarian introduced the Intervention B condition by explaining that there was no time for special rewards to be given but the game itself would continue. When a team won during these 2 wk, the librarian verbally reinforced the members as she had always done. Following the

second week of this phase, the librarian explained that rewards would again be available, thus reinstating Intervention A. This phase remained in effect throughout the remainder of the school year, 4 wk.

## RESULTS AND DISCUSSION

Figure 1 represents the percentage of the class whose behavior was rated task-relevant, off-task, or disruptive during each of the four experimental phases in both library and classroom settings.

During baseline, the percentage of the class exhibiting task-relevant behavior in the library averaged 73% (range 70-76%). Percentage exhibiting off-task behavior averaged 9% (range 5-15%) and disruptive behavior averaged 18% (range 13-25%). This degree of disruptive and off-task behavior was judged intolerable by the librarian who often had to interrupt her planned activities to separate fighting children or to urge others to find library books. Behavior in the classroom, although more variable, was comparable to behavior in the library.

When Intervention A was introduced, the percentage of the class observed in task-relevant behavior in the library increased an average of 21% over baseline; percentage observed in off-task behavior decreased 5.7% from baseline and exhibition of disruptive behavior decreased an average of 16% from baseline. Classroom behavior also improved although not as dramatically as the behavior in the library setting.

Reinforcement was removed (Intervention B) to determine if the improved behavior could be maintained by all components of the game except reinforcement. During this condition, the percentage of children exhibiting target behavior showed a trend toward baseline percentages in both settings. The resultant level of disruptive and off-task behaviors was very unsatisfactory to the librarian and consequently this condition was limited to 2 wk. The Intervention A condition was reinstated with resultant positive behavior change in both settings.

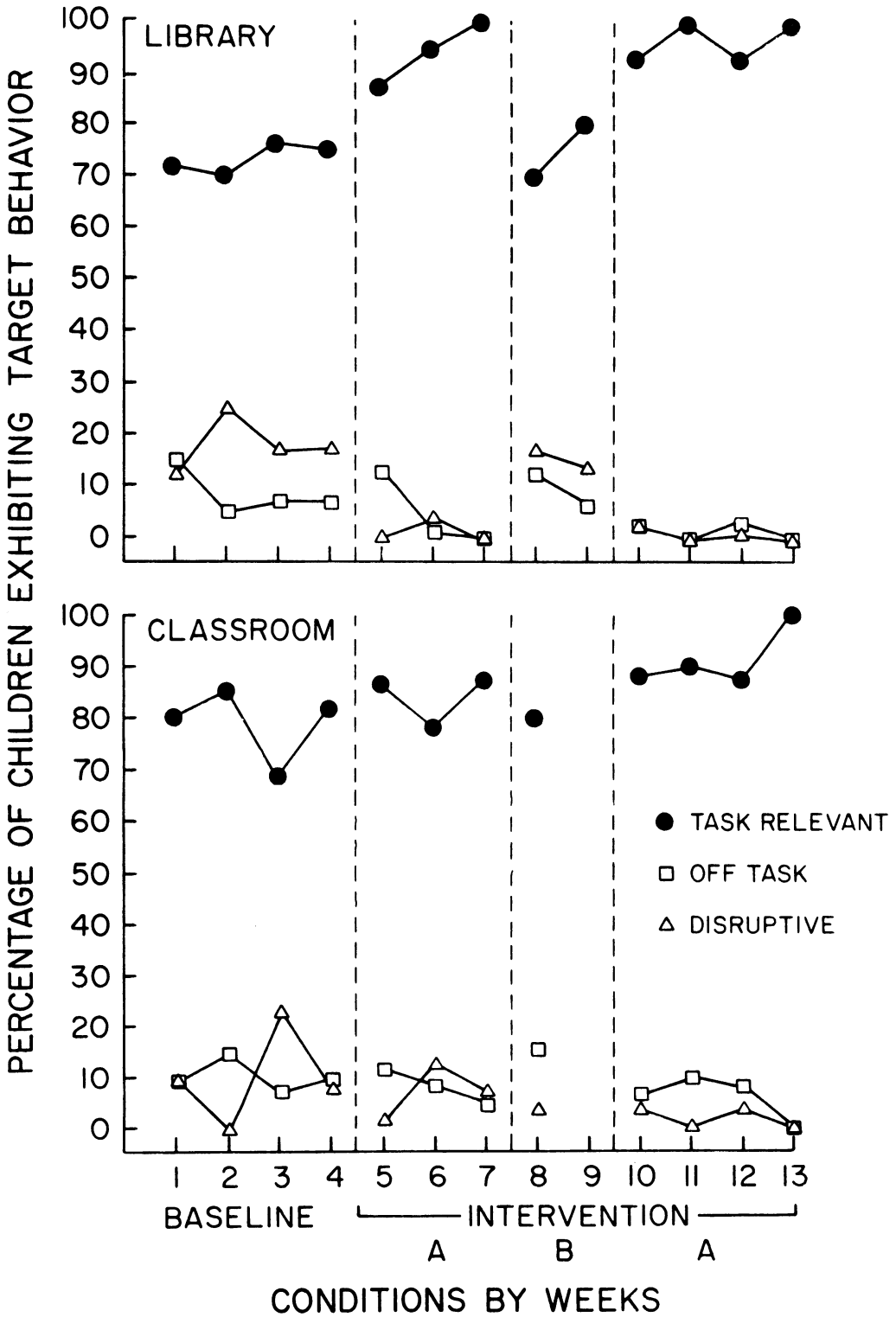


Fig. 1. Percentage of children displaying task-relevant, off-task, and disruptive behavior in library and classroom settings.

Winning the game occurred with a high frequency for both teams during each experimental condition. No examples of peer harassment were observed toward children who prevented their team from winning.

Without reinforcers, the game did not appear to control the behavior of the students satisfactorily in either setting although due to early dismissal in Session 9, reinforcers were technically "missed" for only 1 wk of this experimental phase. The results are similar to the findings of Harris and Sherman (1973) and Medland and Stachnik (1972) who found that the game was more effective when reinforcers were used.

Although not experimentally tested, it is possible that student involvement in designing rules and stating rules in positive terms may provide additional benefits when compared to standard game procedures. Benefits may include increased student motivation to behave appropriately, less resentment among class members, and increased teacher attention for positive behavior. Improvement in the comparison setting may have been influenced by the use of the classroom teacher in delivering reinforcers, but the effect of this procedure was not empirically evaluated.

The fact that the adapted good behavior game appears to have improved the behavior of students in the experimental setting as well as in the comparison setting suggests that it may be an effective intervention method when problem behavior occurs in more than one setting. Few published reports exist that deal with behavior

management in libraries. Consequently, the demonstrated effectiveness of this procedure may make the game desirable to other librarians. The procedures may also be attractive to teachers of special classes that are held weekly rather than daily such as art, music, and physical education.

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