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Effects of Reprimands and Praise on Appropriate Behavior in the Classroom

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The effects of positive consequences on appropriate behavior at the beginning of a classroom experience were examined during an academic program for students with behavioral and academic difficulties. The results showed that the use of reprimands alone was associated with high levels of on-task behaviors during the initial days of the class. The addition of praise produced no change in the rate of on-task behaviors or the level of academic performance. The withdrawal of all consequences caused significant decreases in on-task behavior and academic productivity. The subsequent use of praise alone led to an initial increase followed by a dramatic decline in on-task performance, resulting in no change in the average rate of on-task behavior relative to the use of no consequences. These results are consistent with previous findings indicating the importance of reprimands for maintaining appropriate classroom behavior. Speculations regarding potential roles of praise are briefly discussed.

The importance of negative consequences for effective classroom management was consistently supported in a recent series of four experiments by Rosén, O'Leary, Joyce, Conway, and Pfiffner (1984). Other applied studies have also indicated the effectiveness of mild negative consequences for reducing inappropriate behaviors (e.g., O'Leary & Becker, 1968; O'Leary, Kaufman, Kass, & Drabman, 1970; Van Houten, Nau, MacKenzie-

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Keating, Sameoto, & Colavecchia, 1982). However, and contrary to original expectations, Rosén et al. (1984) further found that when some level of mild negative consequences was maintained, the withdrawal of positive consequences produced no change in rates of appropriate classroom behavior.

The reason for the absence of effects of praise and other positive consequences in the Rosén et al. (1984) studies is not clear but may be related to the fact that the initiation of experimental manipulations occurred well beyond the beginning of the school year. The data were collected after the teacher had established rapport with the class and had shaped a variety of social and academic behaviors using a combination of positive and negative consequences. Thus, high rates of on-task behavior had already been established, and the children were essentially in a maintenance condition. As classroom rules and routine are learned, positive consequences might be of diminishing importance for the continued maintenance of appropriate behavior, even though similar consequences may have been important for the successful shaping of these behaviors earlier in the academic year. Another factor that may have contributed to the Rosén et al. (1984) findings is that positive social consequences (e.g., praise, public posting of good work) had been paired with informational feedback (e.g., grades) regarding the productivity and accuracy of the children's academic work during the early weeks of the school year. Accuracy feedback remained in effect throughout the studies and might have contributed to the maintenance of on-task behaviors, even in the absence of praise or other positive consequences for academic or social accomplishment. Finally, data collected well beyond the beginning of the school year may reflect the influence of established peer relationships on rates of appropriate classroom behavior. As noted by Rosén et. al. (1984), the presence or absence of peer reinforcers for inappropriate behaviors was apparently a powerful factor in their studies and may have outweighed any effects of positive consequences used by the teachers.

A better understanding of the contribution of positive consequences to effective classroom management might therefore be gained through experiments conducted at the beginning of a classroom experience when teachers are establishing rapport with students and shaping a variety of behaviors, when accuracy feedback has not acquired its full reinforcing value, and when peer relationships are in the early stages of development.

The current experiment was therefore designed to assess the effects of positive consequences on on-task behavior (the primary dependent variable of the Rosén et al., 1984, studies) at the beginning of a classroom experience. We hypothesized that a combination of reprimands and praise would result in increased rates of appropriate on-task behavior, relative to

the use of reprimands alone. Increased rates of on-task behavior were expected to be associated with improved academic performance.

METHOD

Subjects

Nine students (eight boys and one girl) attending a special summer reading program at the Point of Woods Laboratory School served as subjects. All subjects were of at least normal intelligence and resided in a middle-class suburban community. During the academic year preceding the program, one of the children had completed first grade, four had completed second grade, three had completed third grade, and one had completed fourth grade. All students were referred because of behavioral difficulties, including restlessness, impulsivity, inattention, and poor academic performance.The daily 1 1/2-hour program was taught by a female special education teacher experienced in using behavioral techniques.

Observation

The behaviors of the children and teacher were recorded daily in three situations (independent seat work, reading groups, and supervised seat work). Observations were conducted for a total of 1 hour and 15 minutes each day, from behind a one-way mirror. The behavior of the children was coded as either on- or off-task. On-task behaviors included sitting and working quietly, attending to group lessons, and working on any other task approved by the teacher. Off-task behaviors included being out of seat without permission, calling out, daydreaming, aggression, and any other behavior not appropriate to the task as defined by the teacher. Teacher behaviors directed toward the children were coded as praise, reprimands, or academic instructions. Praise included statements of approval directed at a child's on-task behavior. Reprimands included statements of disapproval directed at a child's off-task behavior. Academic instruction was defined as any teacher behavior directed at a child that was neither a praise nor a reprimand, and included feedback on the accuracy of academic work, information giving, and other teaching behaviors.

Observations were rotated randomly among the nine students, with each of the children observed for approximately 25 minutes per day (i.e., approximately 28% of the total class time). Observations were based on

continuous 10-second intervals. If any off-task behavior occurred during a 10-second interval, the entire interval was scored as off-task. Each teacher behavior category could be recorded only once per 10-second interval, and it was recorded only if the teacher's behavior was directed at the child being observed at that time. Data collection was rotated among three undergraduate observers. Each observer recorded the behavior of one child for 2 minutes, then switched to a different child for the next 2 minutes, etc., rotating through all nine children. Intervals during which the children were out of the classroom were not included in the data base. All observers were blind to the hypothesis and design of the study.

Reliability

A fourth observer served as the reliability checker. Daily reliability assessments were covertly collected on each of the observers, with approximately 33% of the data checked. A reliability score for the child ratings was derived by computing a Kappa coefficient (Cohen, 1960) for the number of agreements regarding on-task and off-task behaviors during the total number of intervals observed. The mean Kappa across observers was .86 (range = .72 to .96) during the course of the study. Reliability scores for teacher behaviors were derived by computing Kappa scores for agreements concerning the occurrence and nonoccurrence of each category. During the study, the mean Kappa across observers for each category of teacher behavior was as follows: praise = .89 (range = .50 to 1.00) reprimands = .90 (range = .50 to 1.00), and academic instructions = .89 (range = .74 to .99).

Performance Measures

Academic performance measures consisted of having each student spend 5 minutes during each observation period working on a word identification task tailored to his or her academic level. The mean number of problems completed and the percent accurate were calculated from this measure.

Design

The original multiple baseline design of the present study involved the successive addition of praise for on-task behavior to three different classroom situations, following a baseline period of reprimands alone.

However, data obtained during initial phases revealed no changes in the students' mean percentage of on-task behavior following the introduction of praise to two classroom situations. These results led us to alter the planned procedure in order to investigate the effects of praise on overall rates of on-task behavior using a reversal design. These changes and the results that prompted them are presented in context.

RESULTS

Figure 1 displays the class's mean percentage of on-task behavior for each day and the mean percentage of on-task performance during each phase across all three classroom situations.

Reprimands/No Praise. During the first 5 days of the class, the teacher was instructed to withhold positive consequences entirely, ignoring all appropiate behaviors. During this and all subsequent phases, the teacher's use of negative consequences was restricted to prudent reprimands (i.e., consistent, immediate, calm, quiet, and specific) for off-task behavior. She was also instructed to deliver all academic feedback (e.g., grades, number correct) in a neutral tone of voice, withholding all positive or negative consequences for academic accuracy and productivity, for the duration of the study.

Reprimands/Praise. During this 5-day phase, the teacher was instructed to deliver reprimands for off-task behavior to each child according to the level determined in the preceding Reprimands/No Praise condition. She was also instructed to provide each child with a minimum of two praise statements per day during independent seat work only, contingent upon appropriate on-task behavior. In this and the following conditions, the teacher was directed to deliver praise to each child in an enthusiastic, individualized manner. The teacher was given daily feedback regarding her interaction rates during this and all subsequent phases. The average rate of on-task behavior during independent seat work was not affected by the addition of praise. On-task performance also remained stable during supervised seat work and reading groups.

Reprimands/Increased Praise. The previously established level of reprimands for each child and the rate of praise to each child during independent seat work were maintained. In addition, the teacher was instructed to deliver a minimum of one praise statement per child per day during supervised seat work, also contingent upon appropriate on-task behavior. Since the students' rates of on-task behavior during the three situations remained stable, this phase was discontinued after 3 days.

No Reprimands/No Praise. We hypothesized that the use of reprimands may have maintained the students' rates of on-task behavior

near ceiling levels during the preceding phases, thereby precluding the observation of praise effects. Thus, it appeared that our original plan to add praise during reading groups at this point would fail to yield interesting results. Instead, we opted to eliminate all consequences, in order to lower on-task performance and to investigate the effects of the subsequent introduction of praise on overall rates of on-task behavior, across the three situations. During this 3-day condition, the teacher was instructed to ignore all appropriate and inappropriate behavior, withdrawing both praise and reprimands. As Figure 1 shows, the average percentage of on-task behavior fell dramatically from approximately 75% during the previous phases to 50%.

No Reprimands/Praise. During this 4-day condition, the teacher was instructed to continue withholding reprimands entirely, and to deliver a high rate of praise for on-task behavior to each child. As revealed in Figure 1, the average on-task performance increased during the first 2 days of this condition, then plummeted once again during the second 2 days. The mean percentage of on-task behavior during this phase was not affected by the addition of praise.

Reprimands/Praise. During this 3-day phase, the teacher was instructed to continue delivering praise to each child at the rate determined in the immediately preceding phase, and to resume delivering reprimands to each child at the level she deemed necessary to restore the students' previously high levels of on-task performance. As is evident in Figure 1, this resulted in an immediate and significant increase in the average percentage of on-task behavior.

In summary, the percentage of on-task behavior was stable across days and across phases with two exceptions: No Reprimands/No Praise and No Reprimands/Praise. All subjects followed this pattern, with the exception of one child, whose on-task behavior showed high variability throughout the study..

Academic performance measure results are also presented in Figure 1. As with on-task behavior, the mean number of problems completed decreased significantly during the No Reprimands/No Praise and No Reprimands/Praise conditions. Accuracy varied little throughout, with the exception of some decline during the No Reprimands/Praise condition.

As indicated at the top of Figure 1, the teacher was extremely adept at controlling her own behavior according to instructions. Few errors were made in carrying out the experimental manipulations, and praise and reprimands were delivered contingent upon appropriate and inappropriate task-related behavior, respectively. During the No Reprimands/No Praise and No Reprimands/Praise phases aggressive behavior increased in frequency, and the teacher was forced to intervene on occasions when poten-

	REPS/ NO PRAISE	REPS/ PRAISE	REPS/ INC PRAISE	NO REPS/ NO PRAISE	NO REPS/ PRAISE	REPS/ PRAISE
% ON-TASK	75	75	76	50	51	80
REPRIMANDS	1.2	1.0	1.0	0.2	0.1	1.2
PRAISE	0.0	0.8	1.1	0.0	2.0	2.0
ACAD. INSTRUCT.	26.9	27.5	23.0	24.1	23.4	24.7
# COMPLETE	38	39	40	29	24	36
% ACCURATE	76	72	71	73	68	72

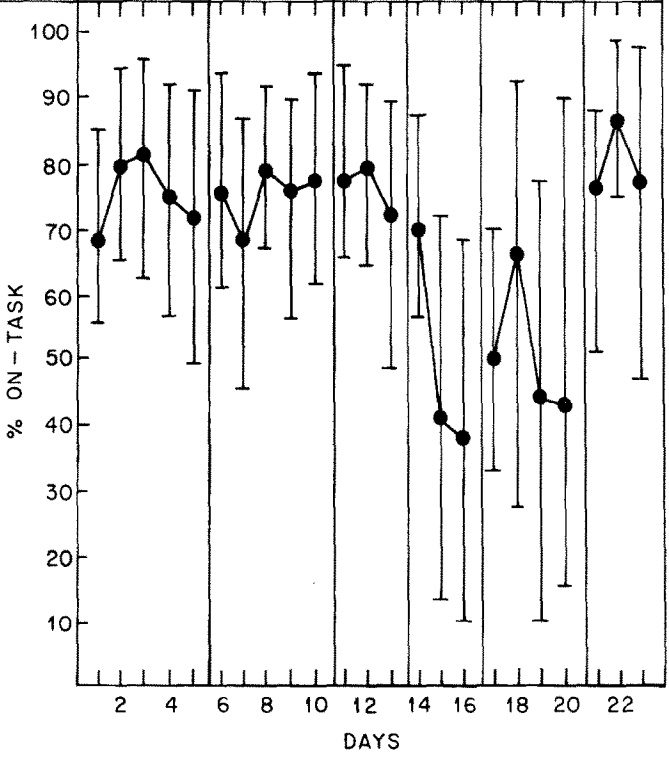

Fig. 1. The mean and range of the percentage of 10-second intervals that on-task behavior was observed are graphed. Phase means for % on-task, for the number of 10-second intervals each teacher behavior was observed per child per 25 minutes, and for the number and accuracy of word problems are noted at the top.

tially harmful behavior occurred (e.g., rubber band shooting, pencil flipping, arm twisting). Thus, occasional reprimands were observed during these phases.

DISCUSSION

Contrary to expectations, the results indicate that the use of reprimands alone was associated with high rates of appropriate on-task behavior at the beginning of classroom experience. The addition of praise did not yield further increments in rates of appropriate on-task behavior or academic performance, though this may have been due to a ceiling effect. As expected, the withdrawal of all consequences had severely detrimental effects on the percentage of time the children spent on-task and on the amount of work completed. The subsequent introduction of praise alone (No Reprimands/Praise), however, was not associated with improvements in the students' average rates of on-task behavior or academic productivity, which remained low for this phase. The initial increase in on-task performance during the No Reprimands/Praise condition may have been due to the children's perception that the teacher was once again monitoring their behavior, and their expectation that she might also deliver reprimands as she had previously. The subsequent drop in on-task behavior during this phase may have occurred as the children learned that they could continue to "get away with" high rates of disruptive behavior.

The results of this experiment are highly consistent with the findings of the original series of experiments by Rosén et al. (1984), and with their conclusion that at least some level of mild negative consequences is important for the maintenance of appropriate and productive classroom behavior. Further, our results suggest that high rates of appropriate behavior may be established and maintained by the use of reprimands alone in a class of children with behavioral and academic difficulties. However, rates of on-task behavior and academic productivity represent only some of the important dimensions of long-term effective classroom management and academic progress. Praise and other positive consequences for on-task behavior may be important for the extended maintenance of good teacher–student relations, and for the development and maintenance of interest and persistence in academic pursuits. Until a greater understanding of such relevant dimensions is achieved, conclusions regarding the role of positive consequences cannot be reached.

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