

Classroom Behavior of Good and Poor Readers

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ABSTRACT The purpose of this study was to investigate objectively observable categories of behavior for good and poor readers in classroom settings. Seven specific observable behaviors of 3 good and 3 poor readers from each of three regular classrooms at each of six grade levels were viewed under natural classroom conditions. Trained observers recorded student behavior for 30 min a day for 10 days. A two-way analysis of variance procedure was used in data analysis. Results indicated that poor readers did not differ from good readers in starting to work on assignments, having necessary materials available, making unacceptable noise, being out of place, or making unacceptable contact with other persons or their property. Poor readers, however, were off task more and volunteered less than good readers did. The results were interpreted to suggest that poor readers could be viewed as uninvolved students. Instructional suggestions are given.

Researchers have written that poor readers and good readers behave differently. In an early review of clinically observed characteristics of poor readers, Robinson (1946) included restlessness, introversion or withdrawal tendencies, inadequate school relations, and conscious self-control bordering on rigidity. Harris and Sipay (1985) cited expressed hostility, negative emotional response to reading, lack of effort, passivity, distractibility or restlessness, and lack of attentive concentration as characteristics of poor readers.

Poor readers, in general, although not in every case, have been characterized as tending to demonstrate maladaptive behavior (Gentile & McMillan, 1987; Jorm, Share, Matthews, & MacClean, 1985). Based on a substantial review of research, Gentile and McMillan characterized the behavior of poor readers as ranging from anger and aggression to avoidance and apprehension.

Classroom behavior has been shown to be highly related to reading achievement among first- and second-grade children (Jorm et al., 1985; McMichael, 1979; Swanson, 1984). On the other hand, Zigmond, Kerr, and Schaeffer (1988) found that the classroom behavior of learning-disabled adolescents enrolled in Grades 1

through 11 is not significantly different from the behavior of their non-learning-disabled peers. Among the behaviors studied were on-task behavior, disruptive behavior, and volunteering comments.

Confusion arises about behavioral characteristics of good and poor readers when clinically derived subjective descriptions are compared with objectively measured classroom behavior and when the behavior of primary children is compared with that of adolescents.

The present research attempts to provide consistency by investigating a single set of objectively observable behaviors of both good and poor readers in classroom settings from Grades 1 through 11.

Method

Subjects

The subjects were 108 students enrolled in regular classes from Grades 1, 3, 5, 7, 9, and 11. Classrooms were selected from public schools in a mid-sized (population 65,000) city in the north central United States.

We chose subjects who were the 3 best and the 3 worst readers in each of three classrooms at each of six grade levels. The relative standing of students was determined by examining the latest standardized reading achievement test scores for each student in each class, except for first-grade students, for whom kindergarten teachers' ratings were used as the basis for selection. The 3 students with the highest and the 3 students with the lowest reading achievement scores became subjects. The fourth highest and the fourth lowest students became alternates if any of the original choices were absent on the first day of observation.

At each of six grade levels, we chose a total of 9 good readers and 9 poor readers from three classrooms. Selection thus resulted in the total of 108 students from 18

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classrooms, 54 categorized as good and 54 categorized as poor readers. The final sample was composed of 106 originally chosen subjects and 2 alternates.

Procedure

Based on a review of literature that specified classroom behaviors associated with good as opposed to poor readers (Gentile & McMillan, 1987; Jorm et al., 1985; McMichael, 1979; Zigmond, Kerr, & Schaeffer, 1988), discussion with classroom teachers, and review of methods for objectively observing student behavior in classroom settings (Deno, 1980; Grambrell, Wilson, & Gantt, 1981; Hoge, 1985; Hoge & Luce, 1979), we chose specific behaviors that seemed likely to differentiate good from poor readers. We observed these specific behaviors in classrooms on a trial basis to ensure that they could be consistently identified. From the original set of specific behaviors, we chose seven that could be consistently identified and precisely defined. Behavioral definitions were refined through pilot sessions performed in classrooms not used in the actual research. Pilot sessions continued until a reliability of 90% was attained by independent observers recording the behavior of the same students at the same time. The behaviors and definitions used in the research follow:

1. *Seconds to start*—number of seconds from the beginning of an activity, as indicated by the teacher, until the student is first on task. Duration recording, 5-min maximum. *First on task*—materials are out and the student is in place, listening to the teacher, making eye contact with the appropriate stimuli, and writing, or has pencil poised, ready to write. The student is not on task when looking for materials.

2. *Materials missing*—number of materials needed for instruction that a student is missing, based on a list obtained from the teacher prior to the observation.

The following five behaviors were recorded using an interval method—one mark for 20-s interval during which the behavior occurred.

3. *Noise*—any sounds created by the student that may distract either another student (or students) or the teacher from the business at hand. The noise may be generated vocally (including talk outs or unintelligible sounds) or nonvocally (tapping a pencil or snapping fingers). Incidentally produced noises (chair squeaks, etc.) are excluded.

4. *Out of place*—any movement beyond the either explicitly or implicitly defined boundaries in which the student is allowed movement. If the student is doing desk work, then movement of any sort out of the seat is out of place. If the student is working with a group, then leaving the group is out of place.

5. *Physical contact or destruction*—any unacceptable contact with another person or another person's property. Kicking, hitting, pushing, tearing, breaking, and taking are categorized as physical contact or destruction.

6. *Off task*—any movement off a prescri that does not fall into one of the three previous categories. Looking around, staring into space or any observable movement off the task at hand is included.

7. *Volunteering*—deliberately volunteering to answer questions or verbally participate in class, including raising a hand to answer or speaking out to answer, even without permission.

We gathered research data by observing each classroom for 30 min a day for 10 days. To prevent experimenter bias, we were not told which students were poor readers, but only which 6 students to observe.

We did not observe reading classes because of a lack of secondary-level reading classes and because the behavior that characterizes poor readers, according to the literature, is more general than a simple reaction to a reading class. Instead, social studies classes, which require students to apply reading skills, were selected for observation. When certain elementary classroom teachers did not teach clearly defined social studies lessons, we substituted language arts lessons.

Behavioral observation began at the start of each day's lesson. Prior to the start of the lesson, the classroom teacher supplied the trained observer with a list of materials that the children needed for the lesson. The teacher also indicated to the observer when the lesson began. The observer then measured the length of time until each student was first on task. The maximum time allotted was 5 min. After 5 min elapsed, the observer recorded materials missing, that is, materials the student did not have that were required for the lesson. Length of time until each student was first on task and materials missing were recorded for each student each day.

The remaining five categories of behavior listed above as numbers 3 through 7 were measured on a rotating interval basis. We observed each student, in turn, for 20 s, and he or she could receive a mark any time during the 20-s interval. Following this procedure, we observed each student for 20 s every 2 min, and he or she could receive a score of from 0 to 15 for noise, out of place, physical contact, off task, or volunteering each day.

Results

We analyzed the data by using a two-way analysis of variance (ANOVA) procedure. Rate of behavior was the dependent variable, and good versus poor reader groups and grade level were the two independent variables.

The mean scores for each of the seven measured behaviors are reported by reader group in Table 1 and by grade level in Table 2. Table 2 does not break down grade level by good and poor readers because no significant interactions were found by grade level and reading achievement. Analysis of variance for each of the behaviors yielded the following results:

1. *Seconds to start*—No difference was found between good and poor readers. Although significant differences were found between grade levels, $F(5, 107) = 6.337, p < .05$, they made little practical difference, because most students at every grade level started from $\frac{1}{2}$ to 1 min after the beginning of the lesson.

2. *Materials missing*—No differences were found between good and poor readers or between grade levels. There were almost no missing materials throughout the duration of the study.

3. *Noise*—Incidents of unacceptable distracting noise were infrequent. No difference was found between good and poor readers or between grade levels.

4. *Out of place*—No difference was found between good and poor readers. There were significant grade level differences, $F(5, 107) = 5.851, p < .05$. Post hoc analysis indicated that 1st- and 3rd-grade children were out of place significantly more often than were 5th-, 7th-, 9th-, and 11th-grade students.

5. *Physical contact or destruction*—Incidents of physical contact or destruction were infrequent. No difference was found between good and poor readers or between grade levels.

6. *Off task*—Much off-task behavior was observed, almost 6 min (median) for the entire group of 108 students per 30-min observation. Poor readers were off task significantly more often than good readers, $F(1, 107) =$

7.925, $p < .05$. Seventh-grade students were significantly less off task, $F(5, 107) = 18.01, p < .05$, than were students from other grades.

7. *Volunteering*—Significant differences were found between good and poor readers in deliberately volunteering information, $F(1, 107) = 14.99, p < .05$. Students from Grade 5 and above volunteered less than did those from Grades 1 and 3.

Discussion

We found no differences between good and poor readers in starting to work on assignments, having necessary materials available, making unacceptable noise, being out of place, or making unacceptable contact with other persons or their property. In these respects, poor readers did not differ from good readers when they were systematically observed in regular classroom situations that involved application of reading, but not direct instruction in reading.

On the other hand, we found significant differences between good and poor readers in attending to instructional tasks. Similar to findings reported by Grambrell, Wilson, and Gantt (1981), poor readers attended less. Significant differences also were found in volunteering to participate verbally in class. Poor readers volunteered less.

Table 1.—Mean Scores for Seven Behaviors Exhibited by 54 Good and 54 Poor Readers Over 10 Days of Observation

Group	Behavior						
	Seconds to start	Materials missing ^a	Noise ^b	Out of place ^b	Physical contact ^b	Off task ^b	Volunteers ^b
Poor reader	51	.00	1.67	.31	.02	6.63	1.45
Good reader	43	.02	1.50	.32	.00	5.51	2.47

Note. $p < .05$ pertains to both off-task and volunteering behavior.

^aNumber of missing objects. ^bNumber of intervals during which behavior occurs (out of 15 possible)

Table 2.—Mean Scores for Seven Behaviors Exhibited by 18 Subjects at Each of Six Grade Levels Over 10 Days of Observation

Grade	Behavior totals						
	Seconds to start	Materials missing ^a	Noise ^b	Out of place ^b	Physical contact ^b	Off task ^b	Volunteers ^b
1	42	0	2.1	7	0	4.8	3.6
1	42	0	2.1	.7	0	4.8	3.6
3	63	.0	0.9	.7	0	7.3	2.8
5	68	.0	1.3	1	0	8.5	1.7
7	26	0	1.0	1	0	2.8	1.9
9	25	.1	1.9	.3	0	5.8	1.0
11	59	0	2.3	1	0	7.3	0.8

^aNumber of missing objects. ^bNumber of intervals during which behavior occurs (out of 15 possible)

This research suggests that in the regular classroom, at all grade levels observed, poor readers did not demonstrate disruptive or noncompliant behaviors that interfered with learning any more than did good readers. In terms of active participation in learning, however, a difference did appear to exist. The poor readers were less engaged and involved than good readers and also inferior in responsiveness and attentive learning.

Gentile and McMillan (1987) made suggestions specifically for poor readers who are uninvolved in learning. The authors suggested that the teachers should emphasize drawing these students out and focusing them on instructional tasks. The teachers should directly prompt and cue unengaged, inattentive learners, guiding them back to academic tasks. Unresponsive learners should be, in a supportive manner, directly requested to respond. The teachers should provide emotional and instructional support designed to generate students' willingness to try.

Students will be more willing to respond when teachers do not embarrass them over incorrect responses and do not give them text materials that are too difficult (Wilson, 1985, pp. 183-198). Bristow (1985) recommended that, to encourage active participation, poor readers must encounter instructional situations in which their efforts can make a difference. In addition, because poor readers tend to perceive themselves as less successful than they are, teachers should honestly and accurately expose the readers' successes.

Teachers who want to help poor readers participate more actively in the classroom should directly, but supportively, ask them to respond, ensure that the classroom learning environment permits participation to result in

success, and commend poor readers directly and specifically for their responses and for their successes.

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