Effects of Sustained Silent Reading on Attitudes Toward Reading

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Sustained silent reading (SSR) is a practice involving readers in the process of reading over a designated time period. The basic assumption, in a pedagogical sense, is that practice in reading contributes to reading achievement. Durkin (1983) suggested that the focus of any reading program should be the development of competence in independent silent reading. In the same light, Gambrell (1978) proposed that "commonsense notions about the reading process tell us that independent reading skills are enhanced through daily practice in silent reading..." (p. 328). On the other hand, little empirical research appears to have been undertaken to determine effects of sustained silent reading on either achievement or attitudes toward reading. However, some important studies have now been made. Some of the most relevant will be reviewed below.

SSR and Reading Achievement

A notable study by Nagy, Herman, and Anderson (1985) examined the effects of free reading on vocabulary gains among average and above average eighth graders. The subjects read either an expository or narrative passage followed by evaluation on several measures of vocabulary. Findings prompted the researchers to state "incidental learning from context accounts for a substantial portion of the vocabulary growth that occurs during the school years" (p. 233). While not measuring vocabulary gains of
subjects involved in a sustained reading program, Nagy, Herman, and Anderson demonstrated that gains in vocabulary occur through "natural reading" (p. 233). A further conclusion follows: since sustained silent reading involves substantial amounts of natural reading it is probable that this practice fosters vocabulary growth.

Pfau (1966) determined that a supplementary program among elementary grade students involving recreational reading had significantly positive effects on 1) interest in reading, 2) sight vocabulary, and 3) written language. Pfau's subjects were first and second graders who spent approximately 40 minutes a day involved in the reading program. Pfau's experimental groups did not engage in just an SSR program but were also involved in planned activities revolving around the materials read.

Evidence from both research and "commonsense" (Gambrrell, 1978) suggest that SSR has a positive effect on reading achievement. More studies in this area are needed, however, if the case for SSR as a stimulus to reading achievement is to be permanently and firmly established.

Focus of this Study

The major purpose of this study concerns, not the effects of SSR on reading achievement per se, but the related area of attitudes toward reading. The following assumptions are accepted: 1) SSR encourages reading achievement and 2) more positive attitudes toward reading result in more reading. Therefore, if it can be demonstrated that SSR fosters more positive attitudes toward reading, subjects engaged in SSR are likely to read more extensively. Thus, benefits are twofold: subjects would increase in reading competence while doing SSR and also increase reading enjoyment. To examine effects of SSR on attitudes toward reading, the following directional questions were asked:

1. Does participation in an SSR program lead to more favorable attitudes toward reading?

2. Do male and female students differ in the attitudes toward reading?
SSR and Attitudes Toward Reading

Minton (1980) implemented an extensive SSR program to examine the effects of SSR on ninth grade students. Overall analysis of the program let Minton to conclude that the program "flopped" (p. 500). Nevertheless, her careful evaluation of the program provides valuable information concerning implementing SSR programs. Minton concluded that inadequate planning and logistic problems contributed substantially to dissatisfaction among students and faculty. Minton maintained her confidence in the value of SSR but within the realm of careful preparation and monitoring to avoid pitfalls accompanying the general assumption that "everyone can and should read at the same time." (p. 502)

Like Minton, Herbert (1987) examined attitudes toward SSR among junior high school students. Herbert reported that analysis of over 600 anonymously reported responses demonstrated that students generally had negative attitudes toward SSR. Further, this researcher reported that students who indicated that they liked to read and also thought of themselves as good readers reported that they did not like the SSR program. Findings were not dramatically weighted in negative directions concerning the SSR program; nevertheless, demonstrated a substantial level of dissatisfaction with the program. More light is shed on these findings through descriptive information reported on the same study reported earlier (Herbert, undated). The researcher reported that approximately half of the subjects said that they did not actually participate in SSR during the allotted time period but did other things including "visiting with friends" (p. 11). This observation suggests a lack of structure and sense of purpose on the part of at least some of the teachers and administrators ultimately responsible for the implementation and maintenance of the program. Given the nature of adolescents, it is hard to believe that most of them would choose to voluntarily read in a social environment when other options are open. Further, those who chose to read might have found themselves in a distracting environment and consequently, developed negative attitudes about this particular SSR program. Although data and observa-
tions reported by Herbert indicate that cautions in implementing an SSR program are necessary, negative attitudes toward SSR might stem, in large measure, from flaws in conducting the program.

Also, at junior high school level, Cline and Kretke (1980) reported on an extensive study involving above average students in a three year SSR program. The researchers found no differences in reading achievement scores between SSR and control groups, but significant differences in the direction of the SSR groups relative to development of positive attitudes toward reading. Cline and Kretke suggested that the study should be replicated with average and below average readers. Despite having worked with students in the well above average range, the researchers concluded that their findings demonstrated "tangible evidence to support the provision of reading practice time for students on a continuing basis." (p. 506)

Pfau (1966) found, as noted earlier, that interest in reading as measured on a reading interest inventory was significantly superior for elementary students in a recreational reading program. In addition, he found that the recreational reading groups made more voluntary trips to the school library than their counterparts in the control groups. While not directly measuring attitudes toward reading, the findings by Pfau suggest that the recreational program encouraged positive attitudes toward reading among the students.

Goostree (1981) determined that students classified as gifted generally have more positive attitudes toward reading than their fellow students. Of the gifted students evaluated relative to reading attitudes, Goostree determined females showed more positive attitudes than males.

Parker and Paradis (1986) found no attitude change in students in grades 1-3, but found an increase in positive attitudes in grade five. However, the researchers reported no change in attitudes between five and six. The authors reported that the increase in positive attitudes demonstrated in grade five and maintained through grade six tended to result from "nonclassroom reading" (p. 315) rather than as a result of changes in
classroom practices. Parker and Paradis also reported that girls at every grade level demonstrated more positive attitudes toward reading than boys in all grades but sixth where the mean attitude scale score was nearly identical for males and females. The greatest sex differences favoring females were noted in grades two, four, and five, the latter two grades being of special interest to this study.

Subjects

The subjects were all from one school located in a lower middle class section of a mid-sized city in southeast United States. There were 19 subjects in the experimental group, seven fourth graders and twelve fifth graders. The fourth and fifth graders were housed in the same classroom in a split four/five combination made necessary to balance class size in the school. The fourth graders were considered strong readers, capable of receiving reading instruction with the fifth graders. The 21 subjects in the control group were fifth graders.

The socioeconomic status and racial composition of both groups was similar. There were four black students in the experimental group and six in the control group. Eleven students qualified for the free lunch program while ten in the control group qualified.

Test data, however, revealed that the groups were not equal in achievement level. The experimental group scored substantially higher on the Stanford Achievement Test (1982) administered immediately after the sustained silent reading program. The Total Reading score for the experimental group was grade equivalent 8.3 as opposed to 6.7 for the control group. This difference made statistical comparison of the groups impossible because subjects were not identified and only group data were analyzed. This mode was chosen to assure students they could respond freely on the attitude survey without identity. Given the nature of the groups, the researchers felt that the subjects would be more candid and honest if they did not have to identify themselves.

Instrument

The Rhody Secondary Reading Attitude Assessment (Tullock-Rhody & Alexander, 1980) was used to measure
attitudes toward reading at the outset and end of the experiment. Although designed for secondary, the instrument appeared suitable for fifth graders as well. The items on this measure are read aloud and students can follow along if they experience difficulty reading any items. The Leikert style format also seemed easy for the subjects in this study to understand. There are 25 items on the scale with a maximum positive attitude toward reading score of five on any one item, totalling 125 representing the most positive attitude possible. Tullock-Rhody and Alexander reported an r of .84 based on the test-retest procedure for establishing reliability. They reported validity data determined from responses of teachers yielding a t of 4.16 (P  001).

Procedures

The second author provided reading instruction for both the experimental and control groups. The only substantial difference in instruction occurred when the experimental group engaged in the 15 min. sustained silent reading program. The control group, however, had approximately 20 min. more instructional time in the regular reading program. Both groups were using the same basal reading series and were proceeding at approximately the same pace.

The attitude scale was administered at the outset of the experiment. Each day thereafter for six weeks the experimental group engaged in the 15 min. SSR program. The teacher created a pleasant, quiet, and orderly atmosphere during the SSR time. In keeping with established practices, the teacher also read during the SSR period. At the end of the six week period the attitude scale was readministered to both the experimental and control groups.

Findings

The experimental group demonstrated an overall drop of nearly two points on the attitude scale. A look at sex differences, however, indicates that this loss is attributable to the substantially lower post experimental scores demonstrated by the boys, who dropped from 79.85 at the outset of the study to 72.57 at the close of the experiment. The experimental girls gained
slightly. There were no substantial differences in any of the control group pre and post attitude scores. Summary data are presented in Table 1.

Table 1
Pre and Post Scores by Group
Mean Attitude Scale

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Experimental</td>
<td>19</td>
<td>92.46</td>
<td>90.68</td>
<td>-1.78</td>
</tr>
<tr>
<td>Total Control</td>
<td>20</td>
<td>88.09</td>
<td>87.52</td>
<td>-.57</td>
</tr>
<tr>
<td>Boys Experimental</td>
<td>7</td>
<td>79.85</td>
<td>72.57</td>
<td>-7.28</td>
</tr>
<tr>
<td>Boys Control</td>
<td>11</td>
<td>86.18</td>
<td>84.83</td>
<td>-1.35</td>
</tr>
<tr>
<td>Girls Experimental</td>
<td>12</td>
<td>99.8</td>
<td>101.25</td>
<td>1.45</td>
</tr>
<tr>
<td>Girls Control</td>
<td>9</td>
<td>90.44</td>
<td>91.00</td>
<td>.56</td>
</tr>
</tbody>
</table>

Noteworthy in pre and post data is the pronounced difference in attitude scale scores among boys and girls. The boys combined, experimental and control (N=18), produced a mean attitude scale score of 83.72 at the outset of the study while for girls the corresponding mean (N=21) was 95.77. At the close of the study, six weeks later, the mean attitude scale score for boys was 80.31 and 96.86 for girls. Note Table 2.

Table 2
Differences in Pre and Post Attitude Scale Score by Sex

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre</th>
<th>(SD)</th>
<th>Post</th>
<th>(SD)</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>18</td>
<td>83.72</td>
<td>(17.77)</td>
<td>80.31</td>
<td>(18.35)</td>
<td>-3.41</td>
</tr>
<tr>
<td>Girls</td>
<td>21</td>
<td>95.77</td>
<td>(14.88)</td>
<td>96.86</td>
<td>(15.68)</td>
<td>1.09</td>
</tr>
</tbody>
</table>

The mean pre and post attitude scale scores for boys were inordinately lowered by scores of one individual in the experimental group who demonstrated a highly negative attitude toward reading. His pre score was 41 while his post score was 37. Observation of
overt behavior of one boy suggests that the lowest score on both pre and post measures came from the same individual. Application of the outlyer principle for removing the scores of this individual raises the mean of the experimental boys from 79.85 to 86.3 at the outset of the study. The post scale scores are 72.57 with the lowest score remaining and 78.5 with the lowest score removed.

The instrument itself, the Rhody Secondary Reading Attitude Assessment (Tullock-Rhody and Alexander, 1980) proved to be stable measure. Application of Cronbach's Coefficient Alpha at the outset of the study yielded a reliability coefficient of .90 while the corresponding coefficient at the conclusion of the study was .92.

Discussion

Regardless of the disposition of the lowest scores, there is ample evidence indicating that boys in this study have substantially poor attitudes toward reading than girls. Further, application of the SSR program appeared to have no positive effects relative to either boys or girls. This finding seems consistent with findings of Minton (1980) and Herbert (1987) who reported that SSR apparently did not result in more positive attitudes toward reading. On the other hand results herein contradict findings, circumstantial differences notwithstanding, of Cline and Ketke (1980) and Pfau (1966) who reported attitude changes favoring reading following SSR programs.

The most remarkable data concern differences in attitudes of boys and girls. These findings complement those of Goostree (1981) who determined that gifted girls have more positive attitudes toward reading than gifted boys.

Observations peculiar to this study suggest that the one extremely negative male measurably affected attitudes toward reading of the remaining boys in the experimental group. On the other hand, the control group males, without the influence of an exceptionally negative member, also scored considerably lower than their female counterparts. This finding is consistent with data reported by Parker and Paradis (1986) who
found substantial differences in grades four and five in attitudes toward reading favoring girls. Parker and Paradis reported that attitude differences among grade six boys and girls were almost non-existent. However, in the Parker and Paradis study, the same subjects were not examined as they progressed from grade to grade. It is not plausible that the boys and girls in the present study would undergo natural changes in attitudes toward reading simply by moving to sixth grade.

Preston (1962) in his classic study comparing American and German readers attributed achievement differences favoring American girls over American boys to cultural variables. Since sex differences in achievement appeared to be reversed among German schoolchildren, Preston suggested that cultural and environmental factors rather than biological principles account for sex differences. Preston proposed that German boys learn to read efficiently and successfully primarily because reading is a "normal activity of the male" (p. 353) in that country. The opposite appears true for American males according to Preston (1979) who reported on research suggesting the American boys perceived of reading as a feminine activity and, thus, not a normal male's activity. Preston (1979) demonstrated his point by returning to Germany to examine the effects of male and female teachers on reading achievement of boys and girls. He determined that having male teachers did not help German boys learn to read any better than having female teachers.

Recommendations suggest that studies be undertaken to determine if, in fact, reading can become a more normal activity for the American male child. Further, longitudinal studies need to be undertaken to determine variation in attitudes toward reading among individual children as they progress through the grades. The Parker and Paradis (1986) study provides a good framework for developing such longitudinal studies.

The question of whether SSR enhances attitudes toward reading remains essentially unanswered. Nevertheless, the quest to find ways and means to encourage what we call natural reading must continue. Determining attitudes of very young children toward reading and
building on factors contributing to positive attitudes should prove helpful. For example, Durkin (1966) found the most important factors in learning reading early were having parents who read to them and reading themselves in the presence of their children.

REFERENCES


Preston, R.C. (1979) Reading achievement of German boys
related to sex of teacher. The Reading Teacher. 32, pp. 521-526.

