The purpose of this study was to determine the effect of independent reading on reading ability. The study, conducted in an East Tennessee middle school, consisted of 21 randomly selected students who read a book of their choice at least 20 minutes every day at school and 22 students that did not. The study lasted for 12 weeks. The students were administered the Standardized Test for Assessment of Reading at the end of the 12 weeks. The scores for grade equivalent and zone of proximal development were analyzed using a t-test for independent means. The results indicated that there was no significant difference in scores. However, there was a significant difference in the scores of the females compared to the males in the group that was reading independently. Contains 21 references and a table of data. (Author/RS)
The Effects of Independent Reading
On Reading Ability of Seventh Grade Students

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Abstract

The purpose of this study was to determine the effect of independent reading on reading ability. The study, conducted in an East Tennessee middle school, consisted of 21 randomly selected students who read a book of their choice at least 20 minutes every day at school and 22 students that did not. The study lasted for twelve weeks. The students were administered the Standardized Test for Assessment of Reading at the end of the twelve weeks. The scores for grade equivalent and zone of proximal development were analyzed using a t-test for independent means. The results indicated that there was no significant difference in scores. However, there was a significant difference in the scores of the females compared to the males in the group that was reading independently.
Independent Reading 3

Literature Review

Reading is a basic part of life. In *Becoming a Nation of Readers*, Anderson, Heibert, Scott, and Wilkinson (1985) explained that reading is a "cornerstone" to a child's success. Not only success in school but also success in life. "Without the ability to read well, opportunities for personal fulfillment and job success inevitably will be lost" (p. 1). Reading is not only a personal concern, it is also a social concern. Research in economics has shown that schooling is an investment in human capital. Human capital is knowledge, skill, and problem solving ability that has a lasting value (Anderson et al., 1985). Fielding, Kerr, and Rosier (1998) indicated that reading is a requirement for most adult employment, for personal achievement, and for the continuation of a democracy. "Reading is not a content area like math, science, literature, or social studies. Reading is a skill. It is the process skill by which children get information form blackboards, books, and computer screens to learn math, science, literature, and social studies" (p. 4-5). Due to the fact that reading is essential, spending time reading independently is also important.
The Rationale for Independent Reading Time

There is a correlation between reading ability and the amount of time spent reading. According to Stephen Krashen (2001), students like to read and they know it is good for them. He further contends that if students are interested in reading and are provided with materials and time to read they will read. On the other hand, research shows that students are not reading. Before installing "Operation Just Read", James Wolf (1998) randomly selected six fifth grade students for interviews on what they read independently in the course of a week. From this small group, three of the students had not read a book, one had read one book and the other two had read two books. A month later they were interviewed again and the results were just as disappointing. He also found that high school students' independent reading time was even worse. During a fourteen-week period, forty-eight percent of the students surveyed said they had read no books at all. McCoy, Larson, and Higginson (1991) conducted surveys of college students and found that there was a decrease in recreational reading in seventh and eighth grade. The reason for that decrease was not because of their reading foundation, but that they were too busy or had lost interest (McCoy et al., 1991). Delegating time for reading
during the school day with the teachers being a role model should be essential to all classrooms.

For some students, the classroom is the only place they have access for time and the materials to read (Routman, 1994). Moore, Jones, and Miller (1980) also found that children not only lack the quiet place to read at home, but they lack the role model to foster the will to read. According to Cynthia Anderson (2000), educators give the students the skills of decoding and comprehension in order to be able to read, but educators do not give them the time to actually read for pleasure. About seven or eight minutes a day is devoted to silent reading at the elementary level, which is less than ten percent of reading time. At the middle school level, the average may be as low as fifteen minutes during a school day (Dishaw, 1977). Michael Cart (2000) indicated that educators need to make the time available for students to read and that the students deserve the opportunity to read during the daily schedule.

Also behind the rationale for reading independently is the overall strengths of a silent reading program. Tierney, Readence, and Dishner (1995) reported the following strengths in an Uninterrupted Sustained Silent Reading (USSR) program:
1. Interest in reading
2. Awareness of a variety of books
3. Feelings of community within the classroom
4. Awareness of reading program and its purpose
5. Information to assist in school or leisure time activities
6. Appreciation of reading, which affords pleasurable experiences when engaged with books
7. Improvement in writing as a result of exposure to wide reading. (p. 65)

Joseph Sanacore (1988) explained that just teaching reading skills does not do any good unless students are able to apply them in actual reading. Independent reading provides an opportunity to practice the skills that are taught.

The Amount of Independent Reading

With all of the benefits of reading, ideally educators would like students to spend as much time as possible reading. Although the importance of independent reading has been established the amount of time spent in the classroom reading independently has not been established (Moore et al., 1980). Michael Cart (2000) explained that the Young Adult Library Services (YALSA) suggests 45 minutes a day as a good Daily Reading Total (DRT). Other
research suggests at least two hours per week for third and fourth graders (Anderson et al., 1985). That number should increase with age and ability. In an independent reading program at Park School in Brooklandville, Maryland, the students spend at least seventy minutes a week in class reading a book of their choice and they are encouraged to read outside of the classroom as well (Isaacs, 1990).

Independent Reading Increases the Quantity of Reading

If students are given the time to read during the school day, they are going to read more. In James Wolf’s (1998) project on “Operation Just Read”, he reported that after educators, community members, and parents focused on independent reading the quantity of books read was dramatically increased. Upper grade students were reading three to six times more books than before the independent reading focus. High school students’ reading increased to one book every two and a half weeks (from one every seven weeks). All students reported reading at least two books during the fourteen-week period. In Heritage Hills Junior/Senior High School, a “Read-In” program was instituted to have twenty to thirty minutes daily of SSR for all students, teachers, and staff. The result reported
by a parental survey showed that eighty-two percent of those that responded saw their child reading for pleasure at home. Furthermore, sixty-eight percent of those that returned the survey noticed an increase in the time their child spends reading over the past two or three years ("From SSR to Reading Stars", 2001).

The more students read the better readers they will become. Julie Anderson (2001) implemented Accelerated Reader into her classroom and found that during independent reading time the students stopped struggling to read the words and their comprehension improved as well as their pleasure for reading. Moore et al. (1980) found that SSR had a positive effect on reading ability and attitude toward reading. Research has found that independent reading improves vocabulary and reading fluency. Instead of completing workbook pages or computer programs, students who read books independently are actually practicing reading (Anderson et al., 1985). Sanacore (1988) found that encouraging reading independently helps students apply skills to text, it expands interests, builds on prior knowledge, improves achievement in subject areas, and it sends the message that reading should be a lifetime habit.
Gender and Reading

Research indicates that girls appear to do better than boys in language arts while boys tend to excel in math and science (Kleinfreid, 1999). On standardized achievement tests, females score higher on writing and reading, while males score higher in science and math. The differences in scores are diminishing except for the reading and writing scores of males compared to females (Byfield, 2000). In fact, the topic of discussion for some time has been how schools are shortchanging girls. Educators may need to take a closer look at what can be done to help male reading scores (Kleinfeld, 1999). When it comes to reading, research done by Vadon (2000) found that adults and students view reading as a feminine activity. Could this factor into why male reading scores are lower? McKenna (1997) found that students see reading as an activity suitable for girls. This theory intensifies with age. Cloer and Pearman (1992) found that males and females have different attitudes when it comes to recreational reading. Girls tend to have a more positive attitude towards recreational reading.
Approaches to Independent Reading

There are several different terms and styles of independent reading. A large amount of research has been done on the different approaches of independent reading. SSR is a common form of independent reading and has been around formally for about ten years (Moore et al., 1980). The rules for Sustained Silent Reading (SSR), according to Cynthia Anderson (2000), that must be taught to the students prior to implementing the program are as follows:

1. Find a comfortable place and get plenty to read.
2. Take care of health issues before or after SSR.
3. Do not sit by any friends or enemies.
4. Do not notice anything.
5. Do not make a sound.
6. Do not make a move. (p. 258)

She also gave guidelines for teachers that are very extensive. The teacher must go over the SSR rules extensively with students; enforce that they must choose books before getting settled; and give the signal to start and stop the independent reading time. The most important rule is that the teacher must also read with the students and follow the same SSR rules (Anderson, 2000). The main objective for SSR is for the student and teacher to experience the pure pleasure of reading (Anderson, 2000).
USSR (uninterrupted sustained silent reading) is the same as SSR in its rules and procedures (Tierney et al., 1995). Another method of independent reading is Drop Everything and Read (DEAR). DEAR is similar to SSR, but stresses that the student will not be held responsible for the material read (Lee-Daniels & Murray, 2000).

In summary, independent reading has been found useful in developing reading habits and abilities. Research has demonstrated the importance of independent reading, the need for independent reading, the benefits in the quality and quantity of reading due to independent reading, and the different approaches to independent reading. However, McCoy et al. (1991) notes the absence of research actually promoting independent reading specifically for seventh to twelfth graders is lacking. Early adolescence is a critical juncture for forming habits and one of those habits, as the research suggests, needs to be reading independently.
Methodology and Procedures

The population for this study was sixth through seventh grade students from a middle school in a small Northeast Tennessee city. The school is part of a district where there are eight elementary schools, two middle schools, and one high school. The population is from larger middle school in the city. Of the 851 students enrolled in this middle school, 85.4% were white, 10.7% were black, 2% were Hispanic, 1.4% were Asian, and .5% was Indian. To give an idea of the socioeconomic status of the school, 46% of the students attending the school qualify for free or reduced lunch. There are also 185 students or 21.7% of the student body that receive special education services.

The sample for this study consisted of two randomly selected, seventh grade classes. The experimental group was comprised of 10 girls and 10 boys for a total of 20 students. Seventeen students were white, 4 students were black, and 1 student was Asian. Four of the 20 students qualified for special education services. The control group also contained 10 girls and 10 boys for a total of 20 students. Sixteen students were white, 4 students were black, and 1 student was Hispanic. Six students qualified for special education services.
The instrument used to collect data was the Standardized Test for the Assessment of Reading (STAR) from the Accelerated Reader Program. This test is a computer based norm-referenced reading test. The test provides an estimate of the students' individual reading levels. It also provides a Grade Equivalent (GE) score and a Zone of Proximal Development (ZPD) level for each student.

Grade Equivalent scores were evaluated while the students were taking the test. When the student answers correctly the questions become more difficult resulting in a higher GE score. If the student answers incorrectly the difficulty level and the GE score decrease.

The Zone of Proximal Development (ZPD) scores were also evaluated. The ZPD is the readability range in which the student should be selecting reading material. This range correlates with the GE estimate to provide the most appropriate reading level for the student. This level provides the range the student should be reading in to be able to practice reading with the least frustration. The Institute for Academic Excellence developed the ZPD score on the STAR test according to the Vygotskian theory by using the data from 80,000 students in the 1996-1997 school year (Advantage Learning Systems, 1999).
The reliability of the STAR test has been tested. The test-retest method was used. The test-retest reliability estimates were calculated by using Scaled Scores and Instructional Reading Levels. Correlation coefficients were determined for norm-referenced and criterion-referenced scores. In 1999, reliability estimates using the test-retest method were calculated to be .94 for all twelve grades. The correlation coefficients of the Terra/Nova test and the STAR test for seventh grade were .69 in the fall of 1998. (Advantage Learning Systems, 1999).

**Procedures**

Before conducting this study permission was granted from the superintendent of schools and the building principal. The next step was to select a sample for the study. The sample consisted of two seventh grade classes that were randomly selected. Both classes were taught reading by the same teacher. One class served as the experimental group and the other class served as the control group. The experimental group read for twenty minutes every day during the twelve-week experimental period. The control group did not participate in daily independent reading. Both groups took the STAR test at the
end of the twelve week period. The students' GE scores were also examined in order to determine the effect of the time spent reading independently during the twelve-week time frame.
Results

Three research questions were used to guide in the analysis of the data for this study. Each research question was followed by a research hypothesis. The research questions were analyzed by using t-tests for Independent Means at a .05 level of significance.

Research Questions

1: Is there a difference in growth of reading ability when students are given time to read independently during the school day and when they are not given the time to read independently?

2: Is there a difference in ZPD (Zone of Proximal Development) scores when the students are reading independently and when they are not?

3: Is there a difference between male and female reading ability when reading independently?

Research Questions 1, 2, and 3 were analyzed using t-test for independent means. Questions 1 and 2 did not yield significant results. Therefore, the null hypotheses were retained. However, Question 3 yielded significant results ($t(18) = 2.09, p < .05$). The results are displayed in Table 1.
Table 1

**T-test for Independent Means for Males and Females Reading Independently**

<table>
<thead>
<tr>
<th>Gender</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Sig.(2tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>8.98</td>
<td>3.68</td>
<td>18</td>
<td>2.09</td>
<td>.044*</td>
</tr>
<tr>
<td>Males</td>
<td>6.02</td>
<td>2.94</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note *< .05
Discussion

Summary of Findings

In regard to the research hypothesis of the growth in reading ability when students are given the time to read independently during the school day and when they are not, the results indicated that there was not a significant difference in reading ability of the students that were reading independently and those that were not. The mean reading score (GE) for the experimental group (M=7.56) was higher than that of the control group (M=6.41), but it was not significantly different. Therefore, the null hypothesis was retained.

The results were not consistent with the literature review that found that the more a student reads the better reader he or she will become (Anderson, 2001; Moore et al, 1980). While investigating into possible reasons for the insignificant results, the researcher believes that time in different ways impacted the results of the study. The short period of time the study took place may have come into play. The system in which the study took place was placing a huge emphasis on reading during the time frame the research was being conducted. Therefore, students were reading more than they had in the past and this could have motivated the control group to read outside of the
classroom. The researcher feels that these factors may have contributed to results of this study.

The results of the second research question regarding the zone of proximal development were very similar to the results of reading ability in the first question. The mean for the experimental group was higher than that of the control group, but there was not a significant difference statistically. The reasons for these results could be attributed to many of the same reasons of time as the results of the first question.

In regard to the third research question of whether there was a difference between the reading ability of females and males when reading independently, the researcher found that there was a significant difference. These results were consistent with the literature review for this study. Kleinfield (1999) found that females score higher on reading achievement tests than boys. Upon observation of the experimental group, the researcher found that the boys had the tendency to want to go to the library and check out another book before they were finished with the one they were reading. The girls tended to read a book to completion and were content to sit and just read. The boys had to be prodded to read. This may be consistent with Cloer and Pearman's research that males and females
have different attitudes when it comes to recreational reading. If boys do not have a positive attitude towards reading independently then they are probably not going to do it very well.

Conclusions

In conclusion, this research was conducted to explore the effects of reading independently. This study found that there was not a significant difference in reading ability of students who read independently during the school day and those that did not. The results did indicate that girl's reading ability was higher than boy's when reading independently.
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