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Relationship between reading comprehension strategy use and daily free reading time

Fatma Susar Kırmızı^a *

^aFaculty of Education, Department of Primary Education, Pamukkale University, Denizli, 20070

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Abstract

Problem Statement: It is not sufficient to simply decode word meaning to comprehend a reading text. To achieve comprehension in reading, an effective reader should be able to successfully implement such practices as relating the text with his or her own background knowledge, summarizing information, drawing conclusions, and posing questions at the text. Use of reading comprehension strategies facilitates a successful reading process. However, use of strategies may not always be sufficient for a successful reading process. There are other factors that increase student motivation. Allotting a certain amount of time to reading may be highly effective in increasing reading success.

Purpose of the Study: This study aims to determine the relationship between use of reading comprehension strategies and daily free reading time among 4th and 5th grade primary education students.

Method of the Study: Descriptive method was used to identify the situation. The study was conducted on 4th and 5th grade primary education students to examine the relationship between their use of reading comprehension strategies and daily time allotted to free reading.

Sampling: The study was conducted on 402 (208 girls, 195 boys) students at 4th and 5th grades attending 7 primary education schools in İzmir/Buca. 51.7% of the participants were female and 48.3% were male. The sample was determined through stratified sampling method.

Data Collection Instrument: In this study, a "Reading Comprehension Strategies Scale" (RCSS) was used to determine students' level of use of reading strategies. The daily time that student spend free reading (stated in minutes as unit of time) was obtained through the personal information form of the scale.

Data Analysis and Interpretation: As a result of the analyses, the use of reading comprehension strategies was found to be a significant predictor on daily time spent reading ($R^2=0.57$, p=0.00). Based on this result, it can be stated that there is a significant positive relationship at a medium level between use of reading strategies and daily time spent reading.

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Keywords: Reading comprehension strategies; time spent reading; relationship; primary education.

1. Introduction

Recent studies show that effective and good readers undergo "a constructive process" by undertaking certain mental activities. Monitoring one's own learning and active participation in one's learning process are highly

^{*} Fatma Susar Kırmızı. Tel.: 05056336072

E-mail address: fsusar@pau.edu.tr

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effective both on achieving comprehension in reading and realization of learning (Lenski & Lewis, 2008; Keer & Verhaeghe, 2005; Wormeli, 2004; Allen 2003; Harvey & Goodvis 2002; Senemoğlu, 2001, Abu-Rabia, 1996). Simple comprehension of meaning of words is not sufficient to comprehend a text while reading. To achieve comprehension in reading, effective readers need to implement such practices as relating their background experience with the text, summarizing information, drawing conclusions, and posing questions at the text (McNamara, 2007; Block, Rodgers and Johnson, 2006; Keer & Verhaeghe, 2005; Allen, 2003). "Effective readers know how to apply decoding skills to recognize words quickly and efficiently. Effective readers have good vocabularies in relation to their age and show high word recognition. Effective readers possess strong fluency skills" (Tankersley, 2003: 1).

Some of the reading strategies that have been developed and utilized are anticipation guides, List/Group/Label, QAR (question-answer relationship) and H-map graphic organizers. Anticipation guides are used to raise the reader's expectations about meaning prior to reading a text (Vacca & Vacca, 1986). An example for a guided reading activity is the strategy of QTA, that is, Questioning the Author. This activity has great potential to increase a student's understanding of the material. It helps students who are struggling to understand the text. The teacher uses queries and probes to encourage students through modeling (Salinger & Fleischman, 2005). Meta-cognitive strategies can be described as self-monitoring and regulating activities that focus on the product and the process of reading, support readers' awareness of comprehension, and assist in the selection of cognitive strategies as a function of text difficulty, situational constraints, and the reader's own cognitive abilities (Lories, Dardenne & Yzerbyt, 1998).

Reading comprehension is the act of thinking and constructing meaning before, during and after reading by integrating the information presented by the author with the reader's background knowledge (Meissner & Yun, 2008; Sweet & Snow, 2003; Snider, 1989). A reading strategy is defined as "a systematic plan consciously adopted and monitored to improve one's performance" in learning (Haris & Hodges, 1995: 244). Comprehension involves constructing meaning that is reasonable and accurate by connecting what has been read to what the reader already knows and thinks about all of this information until it is understood. Comprehension is the final goal of reading instruction. While fluent decoding is an essential component of skilled reading (Block & Pressley, 2002), it should be considered a prerequisite to strong comprehension rather than an end in itself. A short list of examples of comprehension strategies includes comprehension monitoring, cooperative learning, using graphic and semantic organizers including story maps, answering questions about what has been read, having students create their own questions about what they have read, using prior knowledge to connect what they read to what they already know, and summarizing what they have read (Learning Point Associates, 2004; http://www.learningpt.org). What these proficient readers have in common is the use of comprehension strategies to help them understand more of what they are reading. The ability to know when and how to use these strategies is essential to understand different types of texts such as stories, informational text or poetry. Good readers apply comprehension strategies without being directed to do so. They have become self-regulated in their use of these strategies.

There are numerous factors that affect the use of reading comprehension strategies. One of these factors is the time devoted to reading. Studies conducted in this area show that the more time is spent reading, the more reading strategies are used. One such study is a the study reported by Aarnoutse and Leeuwe (1998). Aarnoutse and Leeuwe (1998) examined the relationship between reading comprehension, vocabulary knowledge, reading pleasure, and reading frequency. The aim of this longitudinal study was to determine the degree to which reading comprehension, vocabulary knowledge, reading pleasure, and reading frequency later in life can be predicted by earlier measures of the same variables. A cohort of 363 primary school children was monitored for five years. The results indicated that the scores for reading comprehension, vocabulary knowledge, reading frequency measured at a particular point in time could highly accurately be predicted by measures of the same variables at an earlier point in time. The precision of the prediction for reading comprehension and vocabulary knowledge was found to be better than for reading pleasure and reading frequency. Reading pleasure and reading frequency run rather autonomously with respect to reading comprehension and vocabulary development.

The aim of this study is to determine and evaluate the relationship between the use of reading comprehension strategies and daily time spent reading among 4th and 5th grade primary school students. In line with this aim, the sub-problem of this study was stated as the following: Is there a relationship between students' use of reading comprehension strategies and daily time that they spend reading?

2. Method

This is a study aimed to determine the relationship between students' levels of use of reading comprehension strategies and daily time that they spend reading. Thus, the relational model was used in the process of the study (Baştürk, 2009; Karasar, 2005; Büyüköztürk, 2002; Baykul, 1999). The levels of reading comprehension strategies used by students were identified through a scale prepared for this purpose, and information about daily time spent reading was collected through a question included in the personal information form. The amount of time that students devote to reading for pleasure as an extracurricular activity was determined in terms of minutes.

2. 1. Sampling

The study was administered on students at 4th and 5th grades of primary schools located in İzmir/Buca. The "Stratified Sampling Method" was used to determine the sample for this relational study aimed for situation analysis. The scales were administered in 7 primary education institutions, which were randomly selected from each stratum. Of the 402 participants of the study, 208 were girls and 194 were boys. 51.7% of the participants were female students.

2. 2. Data Collection Instruments

In this study the "Scale of Reading Comprehension Strategies (RCS)", developed by Susar Kırmızı (2006), was used to determine the levels of reading strategy used among students at 4th and 5th grades in primary schools (Susar Kırmızı, 2006).

After the items were collected, expert opinions were sought from 19 different fields, as a result of which the statements were rearranged. Initially, the scale was compromised of 34 statements expressing students' judgments of reading comprehension strategies used by students. To determine students' levels of agreement to these judgments, a Likert-style 1-to-5 response scale was used. Factor analysis was administered on the pilot study with 390 students. The KMO value of the scale was found as 0.81. Then, the data obtained from the pilot were subjected to rotated factor analysis, as a result of which the items which had a factor load value of 0.40 and above were selected for the final form of the scale. At the end of the analysis, 8 items were eliminated from this scale. We determined that the items gathered around five factors. For the 7 items of the first factor, the lowest factor eugenvalue was 0.44 and the highest was 0.75 (Cronbach's Alpha 0.81). For the 8 items of the scond factor, the lowest factor eugenvalue was 0.44 and the highest was 0.73 (Cronbach's Alpha 0.77). For the 5 items of the third factor, the lowest factor eugenvalue was 0.60 and the highest was 0.731(Cronbach's Alpha 0.73). For the 3 items of the fifth factor, the lowest factor eugenvalue was 0.56 and the highest was 0.731(Cronbach's Alpha 0.73). According to the results of the data obtained from the pilot study, the scale has 26 items. Considering the entire scale, the Cronbach's Alpha was found as 0.88 and split-half coefficient was found as 0.87.

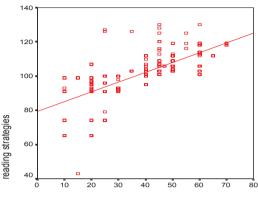
2. 3. Data Analysis Technique

In ensuring validity and reliability of the scale used in this study, arithmetic means, and standard deviation were used, and item scale correlation analyses were used in factor analysis. Following the procedures as part of the study, regression analysis was conducted.

3. Findings

The linearity of the relationship between the use of reading comprehension strategies and daily time devoted to reading was tested to answer the first sub-problem of the study. The "simple linear regression" analysis was administered on the data obtained. The results indicate that there is a linear medium level and positive relationship between daily time spent reading and use of reading strategies [β =.75; R= .75; R²=.57; F=537,97; p= .000; p<.01]. The value regarding regression analysis was found as p=.000. This indicates that the daily time spent reading is a significant predictor of use of reading strategies. 57% of the total variance related to use of strategy use may be said

to account for daily time spent reading. The scatter diagram and regression line obtained for these two variables are presented in Figure 1.



dailiy time (minute) spent reading

Figure 1. Scatter diagram for use of reading comprehension strategies and daily time spent reading

Figure 1 shows that there is a linear and positive relationship between use of reading strategies and daily time spent reading. The points that show participants' values related to the two variables gather around the one line. Students use reading strategies as much as the daily time they spend reading. The participants who devote more time to reading per day and those who enjoy reading, naturally exert more effort to understand what they are reading. Therefore, they tend to use reading strategies more consciously or unconsciously. These findings indicate that these two variables affect one another in a positive direction. Aarnoutse and Leeuwe (1998) studied the relationship between reading strategies and frequency of reading. In this study, a linear relationship at a high level was found between these two variables ($R^2=0.97$; p=0.00).

4. Discussion and Suggestions

Relating effective reading process solely to use of reading strategies would be misleading. Of course, there are different variables affecting this process. One of these is the time spent reading per day. Students who enjoy reading and devote time to reading every day will make more effort to understand and use reading comprehension strategies.

According to the results obtained in this study, there is a linear medium level relationship in the positive direction between the use of reading strategies and daily time spent reading. 57% of the total variance related to the use of reading strategies can be accounted for the daily time spent reading (p=0.00). Aarnoutse and Leeuwe (1998) examined the relationship between reading strategies and frequency of reading. According to their findings, there is

a linear relationship at a high level of between the two variables (R^2 =0.97, p=0.00). The relationship between the two variables is at a medium level (57%), which may be evaluated as a natural situation for students at 4th and 5the grades. This period is the time when reading habits are newly formed. Making a habit of the use of reading comprehension strategies is a long-term process, thus it is natural that there is a medium level of relationship between the two variables.

The following suggestions may be made based on the findings of this study:

1. In this study, a single variable that has an effect on students' use of reading comprehension strategies was examined. Considering that there are numerous factors affecting the reading process, other studies to be conducted in this area to examine and evaluate these variables may contribute more positive results.

2. Students should try and allocate time to read during the day. The amount of time that students devote to reading may be monitored by the family and teachers. The students who allocate little time to reading at home should be encouraged to devote more time to reading.

3. Teachers should provide instruction to teach reading comprehension strategies. Students need to acquire the habit of using reading strategies both in their curricular activities involving reading work and extracurricular reading practice.

4. Students should not be forced to read. Teachers should opt for making reading an attractive activity through rewarding students who read more during the school term compared to other in the class.

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