

# An Investigation on the Relationship between Reading Fluency and Level of Reading Comprehension According to the Type of Texts

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## Abstract

The purpose of this study is to investigate the relationship between the reading fluency and the reading comprehension in accordance with the type of the text. Participants of the study are 99 students who were chosen among fifth graders in a Turkish secondary school. The study utilized descriptive analysis and adopted predictive correlational research design. "Reading Comprehension Test" and "Multidimensional Reading Scale" were used as data-collection tools. According to findings; while the speed of reading, percentage of word recognition, and prosodies differed in favour of narrative texts, there was no significant difference in regard to the level of the reading comprehension. When checked for the magnitude of impacts, the significant difference in the percentage of the word recognition was found small ( $r = .18$ ), the significant difference in the reading speed was large ( $d = 1.02$ ), and significant difference in prosody was in the middle ( $d = .75$ ). It has been found that the reading fluency elements (prosody, accuracy, and reading speed) have a significant positive relationship and a similar relationship can also be seen along the lines of the reading comprehension in different types of texts in each type of the text. Furthermore, the study has stated that speed of the reading and prosodic values can be predictors of the reading comprehension percentage on a significant level in the informative and narrative text types. The findings of this study were consistent with the literature provided by the study.

**Keywords:** Reading Fluency, Reading Comprehension, Reading Rate, Reading Accuracy, Prosody

## Introduction

Reading has kept its prominence of being a basic skill for learning at every stage of an education process so far. Reading playing a key role in the instruction of all academic skills has a predictive feature concerning academic performances of students (Güldenöğlü, Kargın, & Ergül, 2016). There are basic ingredients which are necessary for the improvement and the succession of reading skill. The National Reading Panel [NRP] (2000) has accepted the reading fluency as one of the five critical elements of the reading. The reason behind this acceptance is that it constructs a way for the reading comprehension. Reading fluency skills have been accepted as prerequisites for the achievement of the reading comprehension by many researchers in the field of the reading (Bastug & Akyol, 2012; Bastug & Keskin, 2012; Ehri, 2005; Fuchs, Fuchs, Hosp, & Jenkins, 2001; Keskin, 2012; Keskin & Bastug, 2013; Pikulski & Chard, 2005; Rasinski, 2010; Samuels, 1979; Yıldırım, 2010; Yıldırım & Rasinski, 2014). Three basic components of reading fluency are speed, prosody, and accuracy (Rasinski, 2010). Reading speed is accepted as one of the elements of the automaticity (Akyol, Yıldırım, Ates, Cetinkaya, & Rasinski, 2014). Automaticity is a theory procuring assumptions regarding the transformation from apprenticeship to mastery. The first assumption is based on the idea that the human brain has a limited capacity for conducting difficult tasks while the second assumption is that the mind consumes energy to accomplish these difficult tasks and this energy consumes the limited capacity. The third assumption is that the necessary effort for accomplishment of the difficult tasks is reduced through application. Lastly, when the necessary effort has been reduced to a sufficient level, one is able to conduct another task (Rasinski, 2010, 2014). When the theory of the automaticity is adapted to the reading skill, the picture is as follows: for an individual to achieve the skill of the comprehension that is the aim of the reading, it is necessary he/she is in possession of certain circumstances. One

of them is the word recognition. When a reader lacks the necessary ability of quick analysis, the task of reading shall be a "difficult task" for him/her and therefore his/her mind will consume energy. However, since analysis will become easier as one reads more and more, the energy necessary for analysis will diminish and one will be able to take on a new task. This implies the ability for the individual to reserve his/her mental capacity for the reading comprehension (Adams, 1990; LaBerge & Samuels, 1974; Rasinski, 2010). The theory of the automaticity emphasizes the reservation of one's mental capacity for comprehension through explanation of the features of the reading fluency: the reading accuracy, and the reading speed.

The percentage of the word recognition is the rate of the accurate reading of the text. When mistakes are made at a certain level, the level of the comprehension decrease. For this reason, it is an important element of comprehension skill for the readers to make as less mistakes as possible. Akyol et al. (2014) and Rasinski (2010) have stated that the reading accuracy rates between 92% and 98% can be considered as an instructional level while the reading accuracy rates above 98% are considered as an independent reading level. Those below these intervals are considered as a concerning level and the students at this level are accepted in need of an assistance to read.

Confining the reading fluency as an automaticity process that occurs after repeated reading is not a correct approach either. This understanding reduces the reading fluency to only accurate vocalization and fast reading. While reading correctly is one of the main components of the reading fluency, it is not limited to this only. The speed of reading in accordance with comprehension and prosodic reading, which are skills evolved after this basic skill construct the way to reading comprehension.

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A prosodic reading is called reflection of the emotions and thoughts of the writer to the reading by paying attention to the meaning groups, punctuation marks, emphasis, and tone (Zutell & Rasinski, 1991). In other words, prosodic reading is when the meaning of the text comes to life when the text finds voice. A student's reading prosody is a good indication that he/she has a fast and accurate reading ability (Schwanenflugel, Hamilton, Kuhn, Wisenbaker, & Stahl, 2004). If a child reads with expression, one can be sure that he/she has achieved the reading fluency (Schwanenflugel & Ruston, 2008). Some studies depict that there is a positive relationship between prosodic reading and reading comprehension (Dowhower, 1991; Kitzen, 2001; Kuhn & Stahl, 2000; Rasinski, 2004).

It is noteworthy that the reading fluency is particularly related to academic achievement and test-scores. Many studies have focused on this issue and revealed some significant findings. Hunley, Davies, and Miller (2013), for instance, have pointed out that there is a strong relationship between the reading fluency and statewide reading success. Nunez (2009) has also arrived in a similar conclusion. Nunez (2009) found a strong relationship between the test performance and the reading fluency skills in the "Texas Assessment of Knowledge and Skills" test. A number of similar studies have shown the influence of the reading fluency on the level of success in examinations. It is known that children who are not yet fluent can suffer from many difficulties if they cannot succeed in these exams.

The reading fluency is just one of the many variables that are necessary for comprehension, as well as being a bridge for reading comprehension. Other factors such as vocabulary, world knowledge, and inferencing abilities are also important for the reading comprehension (Schwanenflugel et al., 2006). Understanding a text is a complicated process. This process requires participation of different characters, different types of information, and complex mental representations (Rawson & Kintsch, 2005). The acquisition of basic skills in this fairly complicated process is important for achieving the ultimate goal of reading, which is comprehension.

Another variable that plays an important part in the construction of the reading comprehension is the interaction between the reader and the text (NRP, 2000; Reading Study Group, 2002). In this interaction, the type and the structure of the text are influential, as well as the the reading fluency skills that the reader must possess. Yildirim et al. (2010) found that text types are important factors affecting the comprehension of the text. The familiarity with the structure of the text has an effect on the outcome. The more frequent encounter of students with stories and tales starting from pre-school leads them to be more aware of narrative texts, which affects their reading comprehension in a positive manner. Studying with mostly narrative texts in the pre-literacy period and in the early stage of the school years makes this text easier to understand. Thus, it is clear that studies have concluded with similar outcomes. A research on the fifth grade students conducted by Yıldız (2008), Sidekli, and Buluç (2006) and the study on the eighth grade students of Temizyürek (2008) have detected that students understand narrative texts better than the informative texts. Text type, which is an important variable on understanding, is also an effective factor on the reading fluency (Hiebert, 2006; Rasinski, 2006). The course of content and dialogues contained within the narrative text brings forward meaningful and expressional reading, having an influence on the prosodic reading. Based on the structure of the texts and the topics that are processed, it is seen that the prosodic scores are higher in the narrative texts. Also in this research, when the distribution of prosodic scores is examined it can be seen that students have lower scores in informative texts.

Acquisition of the fluency is not only an indicator of the reading comprehension while reading out loud, but also an important necessity for the reading comprehension in silent reading (Cetinkaya, Ates, & Yildirim, 2016; Gross, Millett, Bartek, Bredell, & Winegard, 2013; Kuhn, Schwanenflugel, & Meisinger, 2010). The silent reading of students who cannot read fluently is also challenging. These children can experience serious difficulties in both understanding and learning the text, developing a negative attitude towards reading because of the difficulty they have experienced whilst reading. Because of their reluctance to read, they are deprived of the richness offered by the reading. It is essential to determine whether a student has a fluency problem at their early ages, as it may be a preliminary symptom of a number of prospective undesired situations (Schwanenflugel and Ruston, 2008). Since the reading comprehension dominates academic life, this determination and subsequent interventions are important for students to be successful in their academic endeavours. It is highly unlikely to expect that students with understanding problems of what they read to be successful in nation-wide exams. Understanding texts is not only related with language education courses but also with mathematics (Özdemir and Sertsöz, 2006; Yılmaz, 2011), science (Obalı, 2009; Yılmaz, 2011), and social studies lessons (Yılmaz, 2011). By solving these issues, therefore, children with comprehension problems can be led to be more successful in their academical life.

### **Purpose of the Study and Methodology**

The purpose of this study is to examine the relationship between the reading fluency components and the reading comprehension.

#### *Research Questions:*

The main research question of the study is structured as "There is the relationship between the the reading fluency and the reading comprehension in the informative and narrative texts of the fifth grade middle school students?" The sub-questions are as follows:

1. Do reading fluency skills (reading speed, prosody, and accuracy) of the fifth grade students show a significant difference according to the text type?
2. Does the comprehension percentage of the fifth graders differ significantly based on the type of the text?
3. There is the relationship between reading fluency skills across and within different types of texts occurred?
4. There is the relationship between the reading fluency skills and the reading comprehension percentages in different types of the texts and the mean reading comprehension percentage correlated?
5. Do the reading fluency skills (reading speed and prosody) predict comprehension abilities based on the type of text in a meaningful matter?

#### *Methodology*

Predictive correlational research design and descriptive statistics were used in this study to examine the relationship between the components of the reading fluency and comprehension skills of the fifth grade students in a Turkish middle school. A correlational study was conducted to examine the relationships between two or more variables without any intervention (Gürbüz & Şahin, 2016). Descriptive analysis was implemented to examine the main features of the dataset (Fraenkel, Wallen, & Hyun, 2012).

### Study Group

This research was conducted in a middle school in Turkey that has pupils who are coming from relatively similar families of average socio-economic levels in Kecioren, one of the central districts of the capital city of Turkey, Ankara. There were ten classes in the fifth grade in the school. It was understood from the e-school notes provided by the school administration that there were no significant differences existed in pupils' academic averages on their Turkish lessons between five different branches of the fifth graders. After a consultation with the school administration and teachers, this research was conducted with students of four classes which were carefully selected from 10 classes in total. Classroom population varied between 22 and 30 students. There were several students in each class who have a special education report. Data was also collected from these students but was not included in the survey. A total of 99 students participated on voluntary basis.

### Data Tools and Methods

**Reading Comprehension.** The Reading Comprehension Test, prepared by the researchers, was adopted to determine the levels of comprehension of the students. The test consisted of two texts: narrative and informative. Six open-ended questions were asked for the informative text, while five were asked for the narrative text. The test preparation process consisted of the following steps:

- Creating a text pool obtained from the Turkish textbooks of the previous years 'curricula and approved by the Turkish Ministry of National Education and the Board for Educational and Disciplinary Affairs.
- Classification of the readability levels of the texts according to Atesman (1997), a readability formula.
- The texts were presented to a group of ten experts formed of some academicians and Turkish teachers to evaluate them in accordance with the "Textuality Criteria Expert Opinion Form" in order to check if these texts are suitable for the textuality criteria. Two of the texts that had received highest scores were chosen.
- To determine questionnaires that are suitable for writing questions by evaluating the criteria of being measurable from the fifth grade reading acquisitions of the 2017 Turkish Language Teaching Programme and informative and narrative texts in order to create comprehension questions for selected informative and narrative texts. Preparation of questionnaires for these identified reading achievements. Formation of a pool of 45 items, 20 for the informative text, and 15 for the narrative text.
- Grouping these questions prepared for the achievements into simple understanding (recognition and recall) and in-depth meaning (based on inference and interpretation) (Akyol, 2016).
- Assessment of questionnaires by experts who are trained in the Turkish language in order to determine the scope of the prepared questions. Pilot study with fifth grade students on the draft ten-question reading comprehension test chosen as a result of expert evaluation.
- Identification of five open-ended questionnaires for the narrative text, six for the narrative text, based on the opinions of field experts and the results from the pilot study.

- Preparation of scoring keys to ensure the reliability of the assessment in the reading comprehension test structured as open ended questions.

According to the rubric, simple comprehension questions were scored between the intervals 0-2 while inferential comprehension questions were scored between 0-3. The reading comprehension test for narrative texts were evaluated with a total of five questions: three questions measuring simple comprehension and two measuring inferential comprehension; while the test for the informative texts was evaluated with a total of six questions: three questions measuring simple comprehension and three measuring inferential comprehension. Those who gave a complete answer to the simple comprehension questions were graded 2 points, those who gave quasi-answers were graded 1 point and those who did not give any answer were not graded with any points. Similarly, those who gave a complete answer to the inferential comprehension questions were graded 3 points, those who gave an above-quasi-answer were graded 2 points, those who gave a quasi-answer were graded 1 point and those who did not give any answer were not graded with any points (Akyol, 2016).

In order to ensure the reliability of the evaluation of the reading comprehension questions and provide an unbiased grading, the "Open-Ended Questions Assessment Rubric" was prepared by two experts.

When we look at the coefficient of consistency between the scorers, Cronbach's alpha coefficient was .987 in the informative text, while it was .986 in the narrative text. These values indicate a high level of consistency between the scorers (Garson, 2013).

**Reading Fluency.** In order to measure the reading fluency, texts were selected in line with expert opinions from a pool of texts that had been previously approved by the Turkish Ministry of National Education and the Board of Education and taught in Turkish classes in recent years. The students read the determined narrative and the informative texts out loud. Approximately two minutes of each student's individual voice recordings were taken and one minute partial assessment was conducted. Reading fluency was based on the reading accuracy percentage, the reading speed, and the reading prosody. A curriculum-based measurement was used for the calculation of percentage of the reading accuracy and the reading speed (Deno, 1985). Since the curriculum-based measurement could only calculate the reading accuracy percentage and reading speed, a special tool designed for measuring prosodic reading was used for the reading prosody. The number of words read in one minute was accepted as the reading speed while the ratio of words read accurately to total number of words read multiplied by 100 was accepted as the accurate reading percentage. "Multidimensional Reading Scale" which was adapted to Turkish by Yıldız, Yıldırım, Ates, and Cetinkaya (2009) developed by Zutell and Rasinski (1991) was used to evaluate the reading prosody. This evaluation scale consists of four dimensions which are expression and sound level, meaning units and intonation, and smoothness and speed. According to the criterion determined on the scale of this evaluation, one student can take at least 4 points and at most 16 points. Recorded audio assisted readings were separately rated by the researchers. The Cronbach's alpha coefficient, which shows the correspondence between the researchers, was in the narrative text, .982; in the informative text, .979. These values indicate that the consistency between the scorers is very high (Garson, 2013).

### Data Collection Method

The study data was collected during the last week of the first semester of the academic year of 2017-2018. The im-

plementation of voice recordings and reading comprehension tests was completed in a week. The study data was collected from the fifth graders of a public school located in one of the central districts of Ankara. The necessary permissions for the research were obtained from the Provincial Directorate of National Education of Ankara. The school administration, guidance, and counseling service and the form tutors in the classrooms where data would be collected were provided with detailed information on the content and the purpose of the research. Information was also given to the students who were involved in the proceedings and it was which stressed that the participation of respondents is voluntary. The study data was collected from all students who volunteered to participate in the study. However the data at hand collected from students who have special education reports was not included in the survey.

As means of the data collection in the survey; The Reading Comprehension Test and the Multidimensional Reading Scale were used. It was ensured that students were in an environment where they feel comfortable during the data collection process. Voice recorders were used during the collection of reading fluency data in the library where the disturbance level was minimum, while the reading comprehension tests took place in the students' own classes. Comprehension tests applied in both types of texts were made in one day apart from one another to care for the student's weariness. A classroom timeframe was given as the exam period. In order to try to minimize the excitement factors of the students while taking the voice recordings, each student was chatted for five minutes before the reading and the possible issues about breathe and excitement controls were tried to be prevented. The reason for doing this is because students seemed nervous when they first arrived to the library, and this nervousness caused them having difficulties controlling their breathing and intensifying their attention. In order to prevent these affecting the reading success, students were chatted before the voice recordings started. It helped them to relax and minimise their nervousness.

**Data Analysis**

Research findings were explained by using descriptive statistics which summarizes data gathered from multiple units (Fraenkel, Wallen, & Hyun, 2012).

For the analysis in the study, it was first checked whether data satisfied the normal distribution condition. In both informative and narrative texts, it was seen that the data of the percentages of the word recognition did not have a normal distribution. For this reason, the Wilcoxon signed rank test was used as a non-parametrical alternative to the dependent *t*-test for the comparison of two scores of the same group in terms of percentage of word recognition. Spearman rank differences correlation coefficient was used for looking at the relationship that occurred between scores where one part of the data was a percentage of the word recognition.

Although the aim was to use the multiple regression method in looking at the predictive power of text types and the reading fluency skills for the reading comprehension skills, it was not performed because of the normality condition of the data was not satisfied and high correlation was found between the variables (Can, 2017).

In this case, simple linear regression and simple linear correlation to the normal scattering data was applied. The Spearman order differential coefficient was used for the data which did not satisfy the normal distribution assumption and therefore no regression analysis was performed.

**Findings**

Table 1 presents the descriptive statistics of the values of the reading fluency elements within the framework of the research, which are classified according to the types of texts and their general averages.

**Table 1.** Descriptive Statistics Results of the Reading Fluency Values and Means According to the Text Types

Reading Fluency Components	n	M	SD
Accuracy in Informative Text	99	92.13	8.24
Reading Speed in Informative Text	99	83.08	20.76
Prosody in Informative Text	99	8.46	2.97
Reading Comprehension Percentage in Informative Text	99	45.59	18.71
Accuracy in Narrative Text	99	93.31	8.15
Reading Speed in Narrative Text	99	92.09	20.45
Prosody in Narrative Text	99	9.40	3.24
Reading Comprehension Percentage in Narrative Text	99	48.55	22.74
Overall Accuracy Average	99	92.72	7.78
Overall Reading Speed Average	99	87.58	20.12
Overall Prosody Average	99	8.93	3.04
Overall Average of Reading Comprehension Percentage	99	47.07	17.88

Table 2 shows the findings of the Wilcoxon signed-rank test whether there is a significant difference between the students' percentages of the accuracy according to the text types.

**Table 2.** Wilcoxon Signed-Rank Test Results of the Accuracy According to the Text Types

Informative-Narrative	n	Rank Mean	Sum of Ranks	z	p
Negative Ranks	41	42.60	1746.50	-2.543	.011*
Positive Ranks	58	55.23	3203.50		
Ties	0				
Total	99				

\**p* < .05

According to the findings of the Wilcoxon Signed-Rank Test, there was a significant difference between the percentages of words recognized by the students according to the type of the text (*z* = -2.543, *p* < .05). In fact, the difference scores are in favor of positive sequences show that students make less mistakes in narrative texts. According to the test results, the effect size of the text types on the accuracy (*r* = .18) was statistically small, (*z* = 2.543, *p* < .05).

Table 3 shows the findings of the *t*-test for paired sample as to whether there is a significant difference between reading speeds according to the text types.

**Table 3.** Paired-Samples *t*-test Results for the Reading Speeds According to the Text Types

Groups	n	M	s	SD	t	p
Reading Speed in Informative Text	99	83.08	20.76	98	-10.155	.000
Reading Speed in Narrative Text	99	92.09	20.45			

\**p* < .05

Findings from the *t*-test for paired sample show that the reading speed of the narrative texts was significantly higher ( $t_{(98)} = -10.155, p < .05$ ). The effect size of the test result ( $d = 1.02$ ) shows that the difference is very large. Results reveal that the words in the informative language take longer to recognize while the students can recognize the words in the narrative text more quickly.

Table 4 presents the *t*-test results of the dependent groups on whether there is a significant difference between the prosody scores according to the text types.

**Table 4.** Paired-Sample *t*-test for the Prosodies According to the Text Types

Groups	n	M	s	SD	t	p
Prosody in Informative Text	99	8.46	2.97	98	-7.453	.000*
Prosody in Narrative Text	99	9.40	3.24			

\* $p < .05$

According to the results of the paired sample *t*-test, the narrative text was found to be read significantly more prosodically by the students ( $t_{(98)} = -7.453, p < .05$ ). The test result calculated the effect size ( $d = .75$ ) shows that this difference is in the middle level. According to this findings, it is safe to say that students can read the narrative texts more appropriately in accordance with the prosody rules.

Table 5 presents the results of the *t*-test for paired sample as to whether there is a significant difference between the percentages of comprehension understood according to the text types.

**Table 5.** Paired-Sample *t*-test Results for the Reading Comprehension Percentages According to the Text Types

Groups	n	M	s	SD	t	p
Reading Comprehension Percentage in Informative Text	99	45.59	18.71	98	-1.378	.17
Reading Comprehension Percentage in Narrative Text	99	48.55	22.74			

According to the findings of the *t*-test of the paired sample, there was no significant difference found in the comprehension percentage according to the text type, ( $t_{(98)} = -1.378, p > .05$ ).

Table 6 depicts the results of a simple linear regression analysis concerning the predictive validity of the informative text reading speed for the percentage mean of reading comprehension of informative and narrative texts.

**Table 6.** Simple Linear Regression Analysis of the Prediction of Reading Speed in the Informative Text (R.S.I.T.) on Reading Comprehension Averages

Variable	B	SE	R	R <sup>2</sup>	Stand. β	t	F	p
R.S.I.T.	.390	.78	.453	.205	.453	5.006	25.057	.000*

n = 99 \* $p < .05$

As can be seen from the simple linear regression analysis concerning the predictive validity of the informative text reading speed for the percentage mean of reading comprehension of both informative and narrative texts, there was a significant relationship between the reading speed in the informative texts and the mean reading comprehension score ( $R = .453, R^2 = .266$ ). The reading speed was found to be a significant predictor of the mean of reading compre-

hension scores ( $F(1, 97) = 25.057, p < .05$ ). The reading speed values obtained from informative texts explain 20% of the means of the reading comprehension scores. The significance test of the coefficient of the principal predictor variable to the regression equation ( $B = .390$ ) shows that informative text reading speed is a significant predictor ( $p < .05$ ). The regression equation that predicts the mean score of the reading according to the result of the regression analysis is as follows:

Reading comprehension score = (.390 x reading speed in the informative text) + 14.639.

Table 7 displays the results of the simple linear regression analysis of the predictive validity of the reading speed in the narrative texts for the reading comprehension percentage of both informative and narrative texts.

**Table 7.** Simple Linear Regression Analysis of the Prediction of Reading Speed in the Narrative Text (R.S.N.T.) on the Reading Comprehension Averages

Variable	B	SE	R	R <sup>2</sup>	Stand. β	t	F	p
R.S.N.T.	.414	.78	.473	.224	.473	5.288	27.964	.000*

n = 99 \* $p < .05$

As a result of the simple linear regression analysis of the predictive validity of the reading speed in the narrative texts for the reading comprehension percentage of both informative and narrative texts, a significant correlation is found between reading speed in reading texts and mean reading comprehension score ( $R = .473, R^2 = .224$ ). It was seen that this reading speed was a significant predictor of the mean of the reading comprehension scores ( $F(1, 97) = 27.964, p < .05$ ). The reading speed obtained from the narrative texts explains 22% of the reading comprehension mean scores. The significance test of the coefficient of the principal predictor variable to the regression equation ( $B = .414$ ) shows that the reading speed of the narrative text is a significant predictor ( $p < .05$ ). The regression equation that predicts the reading comprehension mean score according to the regression results is as follows:

Reading comprehension score = (.414 x reading speed in narrative text) + 8.965.

Table 8 demonstrates the simple regression analysis results concerning the predictive validity of the reading speed for the mean values of reading comprehension percentage means in both informative and narrative texts.

**Table 8.** Simple Linear Regression Analysis of the Prediction of the Reading Speed Averages (R.S.A.) on the Reading Comprehension Averages

Variable	B	SE	R	R <sup>2</sup>	Stand. β	t	F	p
R.S.A.	.421	.79	.474	.225	.474	5.301	28.106	.000*

n = 99 \* $p < .05$

The simple regression analysis results concerning the predictive validity of the reading speed for the mean values of reading comprehension percentage means in both informative and narrative texts show that, a significant relationship was observed between the reading speed average and the reading mean point readings ( $R = .474, R^2 = .225$ ). The findings reveal that reading speed was a significant predictor of the mean of the reading comprehension scores ( $F(1, 97) = 28.106, p < .05$ ). The reading speed means explains 22% of the reading comprehension mean scores. The significance test of the coefficient of the principal predictor variable to the regression equation ( $B = .421$ ) shows that the mean reading speed is a significant predictor ( $p < .05$ ). According to the result of the regression analysis, the regression equ-

ation that predicts the reading comprehension mean scores is as follows:

The reading comprehension score = (.421 x reading speed average) + 10.177.

Table 9 exhibits the results of a simple linear regression analysis of the predictive validity of the prosodic reading scores in the informative texts for the reading comprehension percentage mean scores in both informative and narrative texts.

**Table 9.** Simple Linear Regression Analysis of the Prediction of Prosody in the Informative Text (P.I.T.) on the Reading Comprehension Averages

Variable	B	SE	R	R <sup>2</sup>	Stand. β	t	F	p
P.I.T.	2.799	.54	.465	.217	.465	5.179	26.824	.000*

n= 99 \*p<.05

As a result of the simple linear regression analysis of the predictive validity of the prosodic reading scores obtained from the informative texts for the reading comprehension percentage mean scores obtained from both the informative and narrative texts, it was concluded that there is a significant relationship between the prosody scores in the informative texts and the reading comprehension mean scores (R= .465, R<sup>2</sup>= .217). These prosodic scores were found to be a significant predictor of the reading comprehension mean scores (F(1, 97)= 26.824, p< .05).

The prosody scores obtained from the informative texts explains 21% of the reading comprehension mean scores. The significance test of the coefficient of the principal predictor variable to the regression equation (B= 2.799) shows that the prosody score in the informative texts is a significant predictor (p< .05). The regression equation that predicts the reading comprehension mean score according to the result of the regression analysis is as follows:

Reading comprehension score= (2.799 x prosody score from informative text) + 23.369.

Table 10 shows the results of a simple linear regression analysis of the predictive validity of the prosody scores in the narrative texts for the reading comprehension percentage means in narrative and informative texts.

**Table 10.** Simple Linear Regression Analysis of the Prediction of Prosody in the Narrative Text (P.N.T.) on the Reading Comprehension Averages

Variable	B	SE	R	R <sup>2</sup>	Stand. β	t	F	p
P.N.T.	2.364	.505	.429	.184	.429	4.677	21.875	.000*

n= 99 \*p<.05

The results of the simple linear regression analysis of the predictive validity of the prosodic reading scores obtained from the narrative texts for the reading comprehension percentage mean scores obtained from both the informative and narrative texts, reveal that there is a significant relationship between the prosody scores in the informative texts and the reading comprehension mean scores (R= .429, R<sup>2</sup>= .184). These prosodic scores were found to be a significant predictor of the reading comprehension mean scores (F(1, 97) = 21.875, p< .05). The prosody scores obtained from narrative texts explains 18% of the reading comprehension mean scores. The significance test of the coefficient of the principal predictor variable to the regression equation (B= 2.364) shows that the prosody scores in the narrative texts are significant predictors (p< .05). The regression equation that predicts the reading comprehension mean score according to the result of the regression analysis is as follows:

Reading comprehension score= (2.364 x prosody score from the narrative text) + 24.830.

The results of the simple linear regression analysis of the predictive validity of the prosodic reading scores means for the reading comprehension percentage mean scores in the informative and narrative texts are presented in Table 11 below.

**Table 11.** Simple Linear Regression Analysis of the Prediction of the Prosody Averages (P.A.) on the Reading Comprehension Averages

Variable	B	SE	R	R <sup>2</sup>	Stand. β	t	F	p
P.A.	2.671	.53	.455	.207	.455	5.037	25.369	.000*

The result of the simple linear regression analysis of the predictive validity of the prosodic reading scores obtained from both types of texts for the reading comprehension percentage mean scores obtained from both informative and narrative texts revealed that there is a significant relationship between the prosody scores in the informative texts and the reading comprehension mean scores (R= .455, R<sup>2</sup>= .207). These prosodic scores were found to be a significant predictor of the reading comprehension mean scores (F(1, 97) = 25.369, p<.05). The prosody scores obtained from the narrative texts explains 20% of the reading comprehension mean scores. The significance test of the coefficient of the principal predictor variable to the regression equation (B= 2.671) shows that the prosody scores in the narrative texts are significant predictors (p< .05). The regression equation that predicts the reading comprehension mean score according to the result of the regression analysis is as follows:

Reading comprehension score= (2.671 x prosody score) + 23.198

The relationship between the reading fluency and the reading comprehension scores according to the text types and average points obtained from those text types is presented in Table 12 below.

As Table 12 illustrates, the reading fluency values and the reading comprehension scores obtained from both informative and narrative texts have a significant and positive relationship with both values in itself and other values. The lowest correlation values in informative and narrative scores were found between accuracies (word recognition percentages) and reading comprehension percentages (r= .308, p< .05; r= .402, p< .05). The highest correlation values in informative and narrative scores were found between the prosodies and the reading speeds (r= .827, p< .05; r= .796, p< .05). The lowest correlation value between informative and narrative text scores was found between reading comprehension percentage in the informative text and the accuracy in the narrative text, (r= .257); and the highest was between prosodies (r= .922).

**Conclusion and Discussion**

The reading fluency skill has been the subject of various research in different contexts. Findings of the reading fluency and the reading comprehension of the study will be discussed in the following pages under five different titles.

*Discussion of the Findings on the Differentiation of the Reading Fluency and the Reading Comprehension depending on the Text Type*

Findings of this research in relation to the above heading are quite striking. Findings showed that all elements of the reading fluency varied significantly according to the text, while reading comprehension show no important variation.

**Table 12.** Correlations Between the Reading Fluency and the Reading Comprehension According to the Text Types and Averages

	Informative Text				Narrative Text				Averages				
	R. F. C.*	Speed	Prosody	Accuracy	R.C.P.**	Speed	Prosody	Accuracy	R.C.P.**	Speed	Prosody	Accuracy	R.C.P.**
Informative Text	Speed	1											
	Prosody	.827***	1										
	Accuracy	.738***	.713***	1									
	R.C.P.**	.376***	.342***	.308***	1								
Narrative Text	Speed	.908***	.767***	.603***	.357***	1							
	Prosody	.820***	.922***	.691***	.303***	.796***	1						
	Accuracy	.575***	.638***	.705***	.257***	.566***	.708***	1					
	R.C.P.**	.403***	.450***	.390***	.484***	.450***	.426***	.402***	1				
Averages	Speed	.977***	.816***	.680***	.375***	.976***	.827***	.587***	.437***	1			
	Prosody	.840***	.979***	.708***	.328***	.798***	.982***	.681***	.446***	.838***	1		
	Accuracy	.723***	.732***	.946***	.302***	.626***	.749***	.878***	.401***	.689***	.747***	1	
	R.C.P.**	.453***	.465***	.409***	.831***	.473***	.429***	.393***	.889***	.474***	.455***	.412***	1

\*R.F.C.= Reading Fluency Components

\*\*R.C.P.= Reading Comprehension Percentage

\*\*\*p< .01

When the accuracy of the reading informative and narrative texts (percentage of the word recognition) was examined, it was understood that the students read the narrative texts more accurately. Hence, it is accurate to say that students who are more familiar with the words in the narrative text made less frequent reading mistakes. In informative texts, more reading mistakes were observed, though the difference in the effect sizes of the difference between the text types is statistically small ( $r = .18$ ), indicating that the difference is not of great importance.

When the reading speed in the informative and narrative texts is examined, it is seen that the students read the narrative texts significantly faster and the effect size is very large ( $d = 1.02$ ). According to the theory of automaticity; the better the readers are capable of resolving the words, the faster they are capable of read. When these results are evaluated in this context, it can be concluded that the words in the narrative texts are more familiar to the students. It can be said that, due to the words in the informative text being relatively different, the subject matter is more information-intensive and the structure of the informative text is more complicated compared to the narrative texts, the reading speed decreases.

It can also be said that students are more successful in terms of reading prosody when they vocalise narrative texts. Findings depict that there is a significant difference between the prosody scores according to the text types and this difference is statistically moderate ( $d = .75$ ). These conclusions can be interpreted as students are able to reflect addressing, excitement, fear etc.-which are embedded in the nature of narrative texts in their speeches and are better at emphasis-toning-expression. Given that the informative texts have fewer emotional transitions, dialogues, and exclamations (e.g. surprise and sadness), it can be drawn a conclusion here that such a result is natural. One of the most surprising results of the study is that no significant difference between the reading comprehension percentages in different text types was found. In particular, the relationship between the prosody-reading comprehension in the previous studies (eg. Baştuğ & Akyol, 2012; Calet, Gutiérrez-Palma, & Defior, 2015; Çetinkaya, Yıldırım, & Ateş, 2017; Yamaç & Çeliktürk Sezgin, 2018)

(especially the significant difference of the prosody) and the findings in this study of the significant differentiation of the reading fluency elements according to the text type evoke the idea that reading comprehension percentages would also differentiate based on the type of the text. However, the results did not meet this expectation.

In the research conducted by Diakidoy, Stylianou, Karefillidou, and Papageorgiou (2005), it was seen that in all second, fourth, sixth, and eighth graders mostly understood narrative texts better when they read and listened to. Yıldırım et. al. (2010) stated that students understood the narrative texts better than the informative texts. On the contrary, Güneylü (2008) found that students studying in an elementary school education department at a university understood the informative texts better than the narrative texts.

Findings of the previous studies and findings of this research show no consistency in terms of students' understanding level of the narrative texts. Research generally shows that narrative texts are understood more, but there are studies showing otherwise. In addition, this study has been added to previous findings that there is no difference in the occasion. Findings of this study reveal no significant difference between the percentages of the students' reading comprehension based on the two different text types. From all these results, it can be understood that it is necessary to be cautious when approaching to the idea that any type of text is easier to understand. According to the popular belief which suggests that students, who are exposed to the narrative texts, can easily understand them and the explanations for this are attributed to many reasons such as familiarity of the text and technical terms within the text. Findings of this study, however, have not confirmed this popular belief.

*The Relationship between the Elements of the Reading Fluency Obtained from the Same Text*

According to the findings of the study, the reading fluency values obtained from the informative text have a positive significant relationship between themselves. A positive correlation was also found between the reading fluency

values obtained from the narrative text. The highest correlation between the values obtained from the informative text was found between the reading speed and the prosody ( $r = .827$ ). Followed by the relationship between the reading speed and the word recognition percentage ( $r = .738$ ) and the word recognition percentage and the prosody ( $r = .713$ ). The highest correlations in the narrative text are ordered as reading speed-prosody ( $r = .796$ ), word recognition percentage-prosody ( $r = .708$ ) and word recognition percentage-reading speed ( $r = .566$ ). The order of the magnitude of correlations between reading fluency elements has changed according to the text.

The findings of the reading fluency skills show a significant positive relationship with each other, though they contradict some of the findings of other researchers while showing similarities with some of the other's findings. Bastug and Akyol (2012) have found that there is a moderate relationship between the components of the reading fluency at the lowest level. The lowest correlations were found between the prosody and the correct reading, with the highest correlation being between the prosody and the reading rate ( $r = .869$ ). Yamac and Celik Turk Sezgin (2018) also found significant relationships between the reading fluency elements. According to this, between the reading accuracy percentage and prosody there is a .50 relationship; and between reading accuracy percentage and reading speed there is a .40 significant relationship. Calet et al. (2015) found significant positive correlations between the prosodic reading and the reading speeds in the second and fourth grades.

Findings of Basaran (2013) showed no matching with the findings of this study. Başaran (2013) depicted a significant relation of .226 between the reading speed and the prosody. In this study, the number of incorrect readings was taken under consideration instead of the reading accuracy percentage. A correlation of -.17 was seen between incorrect reading amount and the speed; while a correlation of -.65 is seen between the number of the incorrect readings and the prosody. Despite the expectation of a negative relationship between the prosody and the incorrect reading, the correlation turned out to be meaningless does not fit in with the findings of our study and other studies.

When the findings of this study are discussed with the findings of the previous studies, it can be said that the reading fluency elements have a significant positive relationship with each other, though there is an existence of some contradictions. However, the answer to the question of "Which elements have the highest correlation?" remains unclear. Different orders arise in different studies. However, it appears that the prosodic skill is particularly strong in relation to the other two skills. In other words, there is no serious relationship found between the reading speed and the accuracy, but the correlation of the prosodic skill with these two factors is a fact to be taken into consideration. Whatever the type of the text, the reading fluency elements from the same text type seem to have strong connections with each other. However, there remains a need to look at the relationships between reading fluency values obtained from texts with different characteristics.

#### *The Relationship between the Elements of the Reading Fluency Obtained from the Different Texts*

Findings of the study were obtained from two different texts, namely narrative and informative texts. A significant positive correlation was found between reading fluency elements according to the text types.

Among the correlations of the reading fluency values between texts, the highest values were found between the prosodies ( $r = .922$ ), between the reading speeds ( $r = .908$ ) and between the reading speed in informative texts and the prosody in the narrative texts ( $r = .820$ ). The lowest correlation values were found between the reading speed in the informative texts and the word recognition percentage in the narrative texts ( $r = .575$ ), between the word recognition percentage in the informative texts and the reading speed in the narrative texts ( $r = .603$ ) and between the prosody in the informative texts and the word recognition percentage in the narrative texts ( $r = .638$ ).

According to the findings of the study, it can be said that the reading fluency skills are better reflected in accordance with each other even though if the text types differ. In other words, a student who is capable of reading a narrative text well is expected to read an informative text well, too. Contrary to the general acceptance of the idea that informative texts are more challenging, findings of this study showed that students who are capable of reading a narrative text well are also successful in reading informative texts in their respective grades.

#### *Relations between the Reading Comprehension and the Reading Fluency Elements Based on the Type of the Text*

Research findings revealed that, the meaning and direction of the relationships between the reading comprehension and the reading fluency skills do not change according to the text. When the reading comprehension values which were obtained from the informative text compared with the averages of the reading fluency values the reading speed ( $r = .375$ ) was found as the highest correlation. This is followed by the prosody ( $r = .328$ ) and the accuracy ( $r = .302$ ). It is noteworthy to note that the reading comprehension rate mean in narrative texts and the reading fluency values obtain higher rates and the prosody has the highest correlation. There is a significant positive correlation ( $r = .446$ ) between the reading comprehension in narrative texts and the mean prosodic value. This is followed by the reading speed ( $r = .437$ ) and the accuracy ( $r = .401$ ). According to these findings, the importance of the speed in the informative texts emerges. Prosodic elements (transfer of emotions, pauses, and sounds) have a very important role in the informative texts, however, the importance of this role has been reduced compared with the narrative text. This probably indicates the necessity of understanding the characters' feelings of the narrative text. For the reason of the informative text having being information rather than emotion, prosody may have been degraded to the second rank. Hence, it can be said that different reading fluency elements should be emphasized in different text types.

The findings of the study are consistent with some of the findings of other research while those findings contradict with other findings. For example, Klauđa and Guthrie (2008) investigated the reciprocal relationship between the reading fluency and the reading comprehension in the fifth grade students over a 12-week period. They found that the reading fluency predicted growth in reading comprehension across time points. Additionally, they found that comprehension, as measured at the beginning of their research, predicted the growth in reading fluency after the 12-week time period. Another study by Yıldız et al. (2014) showed that the automaticity, accuracy, and prosody were significantly correlated with the reading comprehension of the fifth grade students.

Çetinkaya et al. (2017) found that there was a significant relationship between the reading prosody and the reading comprehension (simple and inferential based) of

.42. Bastug and Keskin (2012) found a significant positive relationship between the reading fluency and simple and inferential comprehension. However, the relationship of the reading fluency skills for inferential comprehension is found to be stronger than that of simple comprehension. According to Bastug and Akyol (2012), the one occurs with the lowest relation between the reading fluency elements and the reading comprehension is between the reading comprehension and the reading accuracy ( $r = .552$ ). This was followed by the reading speed ( $r = .707$ ) and the prosody ( $r = .852$ ), respectively. Yamac and Sezgin (2018) found significant relationships between the reading comprehension and the prosody of .51; between the reading comprehension and the reading speed of .43; between reading comprehension and word recognition percentage of .40. According to Aytac (2017), there are moderately significant correlations between the prosodic skills of the second and third graders and the meanings they read. Similarly, Rasinski, Rikli, and Johnston (2009) found a significant relationship between the reading out loud prosody of the third, fifth, and seventh grade students and their silent readings.

Calet et al. (2015) found significant positive relationships between reading comprehension in grade two and four and reading speed and prosodic reading. They also looked at the relationships between the elements of prosodic reading (sound, tonality, pauses, compartments of meaning units, and quality) and reading comprehension. The elements with the highest correlation with comprehension were division of meaning units (.55), quality and pauses (.55), intonation (.52), and voicing (.36). This ranking has changed at the fourth grade level and the rates have declined. According to the ranking in the fourth grade the relationships were found as follows: intonation (.42), quality (.40), division into meaning units (.37), pause (.29), and voicing (.14). In the fourth grade, voice is the only element that has shown no significant relationship.

Basaran (2013) summed up the reading comprehension skill with four different data tools: gap filling, multiple choice, in-depth understanding, and short answer. The relationship between these tests and prosody was found to be insignificant regarding multiple choice and short answer tests while having a significant correlation of .249 and 0.847 with gap-filling and in-depth questions, respectfully. Hence, there has not been found a link between prosody and the mechanic structure of reading nor a link found between remembrance of specific details. It is found that the reading speed has a significant correlation with in-depth measuring instrument ( $r = .398$ ) only. This means that there is a limited relationship between the reading out loud speed and the reading comprehension, which suggests that the reading speed may not contribute to the comprehension after a certain level has been reached. When it is looked at the relationship between the number of mistakes made and comprehension, the highest significant associations can be found between multiple choice ( $r = -.791$ ), gap filling ( $r = -.555$ ), and short answer ( $r = -.529$ ). There was no meaningful relationship with questions that require deep meaning. This may suggest that, the increase in the number of mistakes reduces superficial meaning and remembrance.

Kaya and Yıldırım (2016) found a significant relationship between the reading fluency and the inferential comprehension regarding the narrative text. There is no relationship between the reading fluency and simple comprehension obtained from the narrative text in the study. In the same study, findings showed that there are significant relationships between the reading fluency and simple-inferential meanings which were obtained from the informative text type. In this study, only the speed and prosody dimensions of the reading fluency were

discussed. Çetinkaya, Ulper, and Yagmur (2015) looked at the relationship between the silent reading of the reading cards in an accurate and fluent manner and the reading comprehension. In this study, significant correlations were found between the first and second classes reading comprehension and the silent reading fluency, while no significant relationship was found in the fourth grade.

Another finding of the study shows that, the percentage of the comprehension in the two types of the text has a positive relationship with each other ( $r = .484$ ). This finding shows a similarity with the findings of Yıldırım, Yıldız, and Ates (2011). Yıldırım et al. (2011) found a significant relationship between comprehension of narrative texts and comprehension of informative texts in the fourth grade. Therefore, it can be said that there is a moderate relationship between the students' ability to understand both the informative and narrative texts.

#### *Predictive Validity of the Reading fluency for the Reading Comprehension*

The study has examined the reading speed and prosody scores obtained from two different types of the texts. In addition to that, the study has looked into the effect and prediction of mean scores on the reading comprehension scores in the two different texts. The predictive validity of the word recognition percentage for reading comprehension was not examined since the normal distribution requirement for a simple linear regression was not met.

Findings showed that, the reading speeds results on both types of the texts, the mean of these speeds, the prosody scores of both texts, and the mean of these scores significantly predicted the reading comprehension means.

The reading speed values obtained from the informative texts explain 20% of the mean reading comprehension scores; the reading speed obtained from the narrative texts explain 22% of the mean reading comprehension scores while the mean of the reading speeds of both texts explains 22% of the mean reading comprehension scores.

The prosody score obtained from the informative texts explains 21% of the mean reading comprehension scores; the prosody score obtained from the narrative texts explains 18% of the mean reading comprehension scores while the mean of the prosody scores of both texts explains 20% of the mean reading comprehension scores.

When previous works are examined, it is understood that there is no consistency regarding the predictive validity of reading fluency elements for reading comprehension. Some studies do not support the findings of this study while others do. However, in general, it can be said that the prosodic skill is an important predictor of the reading comprehension.

Çetinkaya et al. (2016) reported that the speed of word recognition in the study they did at high school revealed a significant direct effect on reading comprehension and that it explains a 25% variance. The speed of word recognition has a direct effect on the prosody and it reveals a variance of 29%. Following these analyzes, the prosody has been added as an intermediary variable between the speed of word recognition and reading comprehension. In this case, it has been suggested that the direct effect of word recognition speed on reading comprehension is no longer significant, while the indirect effect of it has increased.

Aytac (2017) has suggested that prosody significantly

predicts reading comprehension in the second, third, and fourth grades. Furthermore, Calet et al. (2015) claimed that prosodic reading explains %5 percent of reading comprehension in the second grades while it explains 10% of reading comprehension in the fourth grades. According to the structural equivalence model of Yamac and Celikturk Sezgin (2018), the reading fluency directly and indirectly predicts reading comprehension ( $\beta = .45$ ).

Bastug and Akyol (2012) have discovered that the reading fluency skills can predict reading comprehension on a significant scale. Three variables have been found suggesting to have a prediction level of %72 when used cooperatively. Prosody was found as the highest predictive validity. The reading speed and the reading accuracy were found not to be a significant predictor for the reading comprehension.

Lai, George Benjamin, Schwanenflugel, and Kuhn (2014) examined the longitudinal relationship between reading fluency and reading comprehension by modeling the interaction between the two over time. This model claims that comprehension skills can impact reading fluency and this impact is far greater than the impact that reading fluency has on comprehension skills. The findings of this research show that, compared to the traditional model in which reading fluency predicts concurrent comprehension, models showing a reciprocal relationship do not represent the data better.

In the study of Kaya and Yildirim (2016), the reading fluency values obtained from the narrative text type explained the 11% variance of the inferential meaning, but in simple terms this ratio decreased to .02%. The same rates are 22% to .09% for informative texts. In this study, the speed and prosody dimensions of the reading fluency were only discussed.

When Basaran (2013) examined the predictive validity of the reading fluency skills for four types of reading comprehension tests, he discovered that the reading fluency (speed, accuracy, and prosody) predicts 76% of in-depth comprehension, %64 of multiple-choice, %26 of short answer tests, and %35 of the gap filling results. The relative importance of the reading fluency skills varies in these metrics. The most important reading fluency skills in in-depth comprehension are prosody, accuracy, and speed. In a multiple-choice test, the ranking is accuracy, speed, and prosody. In short response test and gap filling, accuracy, prosody, and speed are listed. These results can be interpreted as the ability of the reading fluency skills to predict an achievement of in-depth reading comprehension. Prosody is at the forefront in this procedure. In addition to this, reading accuracy is more influential than speed for reading comprehension. In short answer tests, the reading speed has a meaningless but there is a negative relationship with the reading.

When the studies on the predictive validity of the reading fluency for the reading comprehension are examined, it is understood that the reading fluency overall succeeds to predict the reading comprehension. In particular, the extent prosodic reading explains the variance in reading comprehension is remarkable. These results can be interpreted as the effect of students' ability to divide the texts into meaning units, transmit emotions and pay attention to pauses on reading comprehension to be substantial. However, when it is evaluated with the other research findings, it appears that the effect of the reading speed on understanding is controversial. Findings of this along with findings of some other studies show that the reading speed can be accepted as a predictor for the reading comprehension. However, it is not always the case

as other research suggests otherwise.. Therefore, it can be said that the effectiveness of the reading speed is over the reading comprehension needs more scholarly attention.

### Suggestions

This study revealed that the reading fluency skills differ significantly according to the text. Therefore, in order for the researcher to evaluate students' reading fluency skills appropriately, it may be helpful to utilize both types of the texts in their examination. Finding a significant difference in the ability of reading according to the text is limited to the findings of this study and it is, therefore, necessary to employ both types of texts for deciding the level of the comprehension. In the same way, it would be more realistic to reach a decision by taking the average of both types of texts in the determination of both of the level of the reading comprehension and the level of the reading fluency skills. Hence, various text types such as poems, memoirs, and biographies can be useful for measuring and evaluating reading fluency skills.

It has been examined in the findings of the study that, reading fluency elements (reading speed, and prosody) can predict reading comprehension skills significantly. Considering the findings of the study and other researches made in the field, it can be concluded that identification of the reading skills and effort made for the improvement of these skills will contribute to the ability. Early detection of some problems in the classroom environment may become possible through the identification of the reading fluency levels of students. Teachers can benefit from reading fluency levels for anticipating their level of comprehension. Relevant regression equations are given in the findings section of the study. Such regression studies may need more generalization in different systems. However, in very crowded classrooms, if time and opportunities are limited, it is possible to detect students' both reading fluency skills and comprehension skills - of course with a certain margin of error - by taking only one-minute reading. Furthermore, this will make it easier for teachers who do not have the necessary conditions.

### Study Limitations and Directions for Future Studies

This research is limited to 99 students aged between 10 and 11 studying at the fifth grade of a secondary school affiliated with the Turkish Ministry of National Education. Future research may benefit more by examining students of different age groups. In this study, while analysing the relationships between the reading fluency components and the reading comprehension, the text type was considered as a variable and the narrative text and informative text were evaluated separately but the difficulty level of the texts was not examined as a variable. We suggest that future studies can take these variables, including poems, into their considerations. At the same time, the relationship between the students' oral reading skills and silent reading comprehension was investigated. In the future research, once the relationship between the reading fluency and the oral reading comprehension is established, comparisons can be made between these two variables and findings can be discussed comparatively.

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