A Research About Oral Reading Fluency of First Grade Students: Text Type and Gender Factor

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Abstract
Oral reading fluency has an undeniably significant role on reading achievement. Especially, a number of studies confirm that there exists a strong correlation between general reading achievement and oral reading fluency which is obtained especially at 1st grade. Also, a regular assessment of oral reading fluency (ORF) is regarded as a crucial parameter in preventing future academic obstacles and possible school failures. In this study, oral reading fluency (WCPM, WCR) of first graders at the end of Spring term have been analyzed in terms of text type, gender and reading errors. Participants of study include sixty 1st graders who are randomly chosen from three schools with financially middle socio-economic status in Bartın city center in western part of Black Sea. In the study, WCPM and WCR values of both expository and narrative text have been calculated with CBM (Curriculum- Based Measurement) procedure and reading errors have been analyzed with reading miscues method. As a result of study, WCPM value of first grade readers is approximately 37 in narrative text and 34 in expository text. On the other hand, when it is considered in terms of Hasbrouck & Tindal's (2006) oral reading fluency norms, it appears that first grade students have significantly lower reading fluency in both text types when compared to lower bound norm value (WCPM=43) in Spring term. However, participants have 76.34% word recognition accuracy (WRC) in narrative text and 75.67% in expository text. According to WRC value, it draws attention that a large proportion of students (>70%) are at frustration level in both text types. In terms of reading errors and types, the number is very similar in both text types. Eventually, while there is found no significant difference in WCR scores in narrative text between female and male students, a statistically significant difference is observed in expository text in favor of males. Findings and results of study have been discussed within context of current studies and there has been made some suggestions for future
Keywords: Curriculum-based measurement, Reading miscues, First-grade readers, Oral reading fluency (ORF).

1. Introduction
Reading fluency is one of the basic reading skills. Oral reading fluency has an undeniably crucial role in reading achievement. Experimental studies conducted recently verify that oral reading fluency plays a key role for successful literacy (Chard, Vaughn, & Tyler, 2002; Kuhn & Stahl, 2003; National Reading Panel [NRP], 2000; Rasinski & Hoffman, 2003). According to Adams (1990), oral reading fluency is one of the characteristic features of best readers. Fluency has an effect on many components of reading such as word recognition and comprehension and it is evaluated as one of five important components of reading in NRP report. Therefore, it appears to be an interesting subject for researchers and practitioners (National Institute of Child Health & Human Development [NICHD], 2000; Pikulski & Chard, 2005).

1.1 Reading Fluency
Reading fluency is defined as the skill of reading a text fast, accurate and with an appropriate expression (NICHD, 2000). Rasinski (2004) noticed that comprehension should be included into this definition. A reader with fluent reading makes reading effortless by using appropriate meaning units and immediately recognizes words. As the students with fluent reading makes an automatic reading, they know how to associate words quickly in order to comprehend text (Tankersley, 2003).

The foundations of reading fluency depend theoretically on LaBerge and Samuels's (1974) theory of automatic processing. According to this theory, students who automatically recognize words during reading devote much of their cognitive energy to a higher level of cognitive processes such as comprehending the text. Also, students don't really get accurate skills and a certain level of reading fluency have difficulty with understanding the text because they devote much of their energy to articulate words accurately. According to Perfetti (1985), individuals who can't read fluently overload their working memory at word level; therefore, their working memories become incompetent to comprehend the text.

According to Topping (2006), there are a number of reasons for difference in reading fluency between students. These differences are listed as word decoding processing, vocabulary level which is obtained in family and social environment (sight word vocabulary), decoding rate of unfamiliar words, usage of context skill which helps decoding words, determining among the possible meanings of a word, speed related creating holistic meaning, student's priority of fluent reading over accurate reading depending on situation.

Oral reading fluency has three main components. These word decoding accuracy, automaticity of word recognition and prosody (Hudson, Lane &Pullen, 2005; Penner-Wilger, 2008). Prosody is defined as reading

skill which includes reading smoothly with appropriate expression and meaning units. There will be no more detailed explanation about prosody which is left out of scope of this study.

Word decoding is defined as the skill of producing accurate phonological representation of each word. Sight-word vocabulary of readers and challenging reading processes which force them to resort to word recognition strategies are related to accurate word recognition skill. Strong understanding of the alphabetic principle, sound association skill, the ability to use other cues to the identity of words in text, in other words they are establishing necessary skills for word recognition (Torgesen & Hudson, 2006). Accurate word decoding is a basic competence for automatization which is the next component of fluent reading (Penner-Wilger, 2008).

Reading speed is closely related to readers' automaticity of word recognition in text. Automaticity is the ability to accurately articulate the words in text quickly with little cognitive effort (Akyol, Yıldırım, Ateş, Çetinkaya & Rasinski, 2014). Automaticity in word recognition is the ability to quickly recognize words with little effort and attention. Automaticity requires quick and accurate identification of individual words as well as speed and fluidity in reading connected text (Torgesen &Hudson, 2006). Reading speed gives information about to what extent words are automatically recognized. In order to determine reading speed, simply the words are assessed which are accurately read by student in 60 second oral reading. Accurately read words also include words which are at first misread but then corrected by student (Akyol et al., 2014).

1.1.1 Oral Reading Fluency Norms

Fuchs, Fuchs, Hosp and Jenkins (2001) state that oral reading fluency evaluations have a key role on reviewing and monitoring the reading skills development. Hosp and Fuchs (2005) emphasize that evaluating oral reading fluency gives a crucial support for identifying difficulties in reading skills. Using the latest norms while evaluating reading fluency plays a key role on guiding teachers and making correct decisions in reviewing, identifying and monitoring development studies. Oral reading fluency norms -developed by Hasbrouck & Tindal (2006) by applying on a large number of samples- are the most preferred norm values all over the world. Oral reading fluency norms for 1st-4th grades are respectively given according to seasons in Table 1 (Hasbrouck &Tindal, 2006).

Table 1. Hasbrouck & Tindal's (2006) oral reading fluency norms

Oral Reading Fluency Norms Grades 1-4				
Grade	Percentile	WCPM* Fall	WCPM Winter	WCPM Spring
1	90th		81	111
	75th		47	82
	50th		**23**	**53**
	25th		12	28
	10th		6	15
2	90th	106	125	142
	75th	79	100	117
	50th	**51**	**72**	**89**
	25th	25	42	61
	10th	11	18	31
3	90th	128	146	162
	75th	99	120	137
	50th	**71**	**92**	**107**
	25th	44	62	78
	10th	21	36	48
4	90th	145	166	180
	75th	119	139	152
	50th	**94**	**112**	**123**
	25th	68	87	98
	10th	45	61	72

Note. * Word Correct Per Minute (WCPM), **Word Recognition Accuracy (WRC)

Oral reading fluency norms in Table 1 are used for 1-4 grades in a school year in three different periods. The values are presented for each class level and five different percentiles (10th, 25th, 50th, 75th and 90th percentiles). When making instructional decisions, teachers produce reliable results by using these norms while evaluating oral reading fluency. Norms in Table 1 are interpreted in process of evaluation as in the following: For 1st and 4th grade students, acceptable limits are 10 points upper or lower than the value which corresponds to 50th percentiles. Those limits are considered as the appropriate interval depending on class level of the student in that year (Hasbrouck & Tindal, 2006).

1.2 Gender in Reading
Studies related to reading come up with evidences which show that females are better than males (Mullis, Martin, Kennedy & Foy, 2007). Many studies which report gender difference in reading show that females have higher performance than males (Wang, Algozzine, Ma and Porfeli, 2011; Aikens & Barbarin, 2008; Berninger, Nielsen, Abbott, Wijsman, & Raskind, 2006; Chatterji, 2006; Logan & Johnston, 2009; McCoach, O'Connell, Reis, & Levitt, 2006; Mullis et al., 2007), and reading difficulties are found more common among males compared to females (Vlachos et al., 2013; Hawke, Olson, Willcut, Wadsworth, & DeFries, 2009). In a longitudinal study, Siegel and Smythe (2005) identified that there existed no significant difference between students with reading difficulties and attention deficit-disordered students.

1.3 Text Structure in Reading
A considerable number of studies show that reading performances of students differ depending on text structure and format (Stamboltzis & Pumfrey, 2000). Text structures are generally divided into two as narrative text and expository text. In narrative texts, relevant events go on linearly. It includes predictable story elements such as place, character, problem and solution (Leslie & Caldwell, 2006). Expository texts are more complex and varied in contrast to narrative texts. Moreover, concepts and the language used in those texts include more abstract content (Best, Floyd, & Mcnamara, 2008).

1.4 Importance of the Research
Many studies indicate that there is a strong relationship between oral reading fluency and reading comprehension at different class levels (Fuchs, Fuchs, Hosp, & Jenkins, 2001; Kim, Petscher, Foorman, & Zhou, 2010; Kim, Wagner, & Foster, 2011; NICHD, 2000; Ridel, 2007; Roehrig, Petscher, Nettles, Hudson, & Torgesen, 2008). Besides, 1st grade is extremely important for future reading success because basic literacy skills are achieved in this grade. Studies report that there is a considerably high correlation between oral reading fluency achieved at first grade and general reading success (Kim, Wagner, & Lopez, 2012 ; Burns et al., 2002, 2011; Padeliadu & Antoniou, 2014; Benson, 2008; Adams,1990; Cutting & Scarborough, 2006; Fuchs, et al., 2001; NRP, 2000). For instance, in the research conducted by Juel (1988), it is observed that word recognition skill at first grade explains 44% variance of reading comprehension skills; however, at forth grade it only explains 12% variance. Moreover, in a research, it has been understood that students at first grade who read fluently maintain these skills at second grade (Ritchey & Speece, 2006).

A regular measurement of students' oral reading fluency gives vital information about predicting their later reading achievements (Buck & Torgesen, 2003; Crawford, Tindal, & Stieber, 2001; Vander Meer, Lentz, & Stollar, 2005). Teachers utilize these assessments by using special enhancement strategies at the beginning stage of reading instruction; and therefore they have the opportunity of preventing follow-up academic difficulties and possible school failures (Coulter, Shavin, & Gichuru, 2009).

Assessment of oral reading fluency functions as a useful tool not only for identifying students who need additional support (for instance dyslexic students); but also monitoring the developments of students in general education who might possibly experience failure while reading and get special education (Johns, 2005; Mehrens, & Clarizio, 1993; Rodden-Nord & Shinn, 1991).

Like in other countries, first grade students in Turkey are expected to have fluent reading skills until the end of Spring and this issue sometimes creates a highly worrisome situation for teachers, school administrators and parents. When studies are reviewed about oral reading fluency of Turkish students, it is seen that studies mostly focus either on 2nd-5th grade students (Turkyılmaz, Can, Yildirim, & Ateş, 2014; Akyol and Temur, 2006; Yıldırım, Yıldız, Ateş and Çetinkaya, 2009; Yıldız, Yıldırım, Ateş and Çetinkaya, 2009; Baştuğ and Akyol, 2012; Yıldırım, Bebek and Turan, 2012; Baştuğ and Kaman, 2013; Yıldız, 2013; Keskin, Baştuğ and Akyol, 2013) or on pre-service teachers (Ulusoy, Ertem and Dedeoğlu, 2011; Ulusoy, Dedeoğlu and Ertem, 2012). Also, it is identified that first grade students' oral reading fluency are not analyzed in detail according to text structure and gender. Due to the reasons mentioned so far and this gap in literature, it is considered that this research would highly contribute to reading studies. In accordance with main purpose of this research, the following questions are attempted to be answered:
1) Depending on text types, at what level are 1st grade students' reading speed?
2) Do students' reading speed follow a normal process according to oral reading fluency norm values of Hasbrouck & Tindal (2006)?
3) Depending on text types, at what level are 1st grade students' reading accuracy rate?
4) How is reading error distribution of 1st grade students depending on text types?
5) Do 1st grade students' reading accuracy rate in narrative text significantly differ depending on gender?
6) Do 1st grade students' reading accuracy rate in expository text significantly differ depending on gender?

2. Method

2.1 Research Model

This research investigates oral reading fluency of 1st grade students at the end of Spring in terms of text type and gender. This research has been conducted with survey research model – one of the quantitative research models. In survey model, the study is generally done with a smaller sample of population and it provides numerical or quantitative explanations about individuals' tendencies, attitudes and ideas (Creswell 2009, p.145).

2.2 Study Sample

Study sample of this study includes 60 first grade students in three primary schools out of ten primary school with middle socio-economical level in Bartın city center in western side of Black Sea. 20 students have been randomly chosen from each school. Table 2 presents the demographic information about study sample:

Table 2. Demographic information about participants

Variable	f	%	M	SD
Age				
6 Age	20	33.3	6.66	.47
7 Age	40	66.7		
Gender				
Female	27	45		
Male	33	55		
Pre-School Education				
Yes	42	70		
No	18	30		

When Table 2 is reviewed, it is seen that mean of participants' age is found to be approximately 73 months (M=6.66; SD=.47); and 33% of students are 6 years old, 66.7% of students are 7 years old. 45% of participants are female (f=27), 55% of participants are male (f=33). Additionally, 70% of students got pre-school education (f=42) while 30% of students started primary school without pre-school education (f=18).

2.3 Data Collection Tools

2.3.1 Assessment of Oral Reading Fluency

In this research, oral reading fluency has been assessed with Curriculum-Based Measurement developed by Rasinski (2004) which is an easily manageable method whose validity and reliability has been ensured. In Curriculum-Based Measurement, the practice is focused on two important dimensions: reading accuracy and reading speed. In this method, student orally reads a text for one minute which s/he didn't read before. At the end of one minute, words read correct per minute (Word correct per minute-WCPM) is calculated by: subtracting the words which are read wrong (errors) from total number of words read by student. In theoretical and experimental studies, word correct per minute-WCPM appeared to be a proper and strong determiner for explaining general reading skill. Also, word recognition accuracy -WRC is calculated by dividing the number of correct words into total number of words read. In this research, word correct reading percentiles in Table 3 are preferred for reading levels (Rasinski &Hoffman, 2003).

Table 3. Reading levels according to word correct reading percentile

Reading Level	Word Correct Reading Percentile	Explanation
Independent	%95 and above	They can read appropriately and accurately according to their class level.
Instructional	%90-94	It identifies those who need instructional support. Students at instructional level sometimes experience difficulties while reading.
Frustration	%89 and below	They read the text with difficulty and make a lot of reading errors. It is generally the level at which reading interventions are made.

2.3.2 Miscue Analysis

Miscue Analysis has been used for evaluating oral reading errors of students (Goodman &Burke, 1979). Students might utter different things apart from what's written in material they read. These errors which are expressed as reading errors help teachers to make a decision related to reading instruction. Miscues which appear during oral reading should not be simply viewed as an error because they provide teachers with important details about students' reading skills. Identifying strengths and weaknesses of readers, Miscue Analysis provides substantial clues for strategies to be used during reading. (Goodman &Burke, 1979; Arglye, 1989). In this research; omission, insertion, repetition, self-correction, substitution and reversal have been used as basic reading errors (Goodman &Burke, 1979; Arglye, 1989; Tolistelfl, 2007; Lim, 1989).

2.4 Texts
One narrative and one expository text -chosen appropriately for 1st grade level- have been used for identifying students' prosodic reading competences. Texts have been chosen from the book which was prepared by Akyol et al. (2014) for purpose of evaluating reading. Narrative text "Crow" includes 79 words and expository text "Health" includes 99 words.

2.5 Procedure
Considering 1st grade students' reading skills in 2015-2016 Spring Term, research data were collected in last week of May. Schools and 1st grade students have been determined by researcher and permission has been asked from parents via their teachers. School library has been used in order to make students more comfortable during data collection. Students have been told that they would not be graded for this reading process and it will be used only for scientific purpose. Then, students have been asked to read the texts and do their best. First, the narrative text and then the expository text were read aloud and audio recordings were obtained. These audio recordings o be scored by a other researcher to calculate inter-rater reliability. The Cohen kappa coefficient which is a statistic measures inter-rater agreement for qualitative (categorical) items was computed for every student's oral reading fluency. Cohen's kappa coefficient (K) for the students' oral reading fluency in the current study between two independent raters ranged from .69 to .78. . As Altman (1991) suggests that value of K range from .61 to.80 means "good" for strength of agreement.

2.6 Data Analysis
IBM SPSS 21 statistical program has been used for the data collected in this research. Data gathered from voice recording have been transferred into a computer and then analyzed. Oral reading recordings of students have been analyzed in terms of word correct per minute, word recognition accuracy and reading errors. First of all, descriptive statistics have been calculated such as percentile, frequency, minimum-maximum values, standard deviation and arithmetic mean. Pie charts and line charts have been used. For 2nd, 5th and 6th problems; normality of data has been controlled for one-sample t-test and independent sample t-test. Kurtosis and skewness coefficients have been analyzed for purpose of controlling normality. As a result of analysis, it is seen that kurtosis and skewness of data remains between +1 and -1 values for both texts. If kurtosis and skewness gets close to zero, it is an indicator for normality of distribution. In literature review, if skewness and kurtosis coefficients are between +1 and -1, it is accepted as sufficient for normality of distribution (Field, 2009). Cohen d is used for interpretation of effect size. Values for d such as 0.2, 0.5 and 0.8 are evaluated respectively as small, medium and large effect (Cohen, 1988).

3. Findings
3.1 Findings Related to Reading Speed
When Table 4 is reviewed, it is seen that the mean of word correct number per minute in narrative text is 36.88 and standard deviation is 21.9 (χ=36.88, SD=21.8); in expository text the mean of word correct number per minute is 34.04 and standard deviation is 17.9 (χ=34.03, SD=17.9). These values indicate that word correct number per minute is much higher in expository text than in narrative text; and there are significant differences between students' word correct number per minute.

Table 4**.** Descriptive statistics related to reading speed

Text Types	N	TNW	WCPM M	SD
Narrative Text	60	79	36.88	21.83
Expository Text	60	99	34.03	18.95

Note. WCPM: Word Correct Per Minute, TNW: Total Number of Words

3.2 Do the word correct per minute (WCPM) of 1st grade students who have participated in the research show normal development according to oral reading fluency norms (WCPM) of Hasbrouck & Tindal (2006) ?
When oral reading fluency norms of Hasbrouck & Tindal (2006) are reviewed, it is accepted normal when 1st grade students in Spring term read 53 words per minute. However, while interpreting these norms, it is stated that -+10 points can also be used as normal value. Therefore, analysis has been done with regarding "43 words correct per minute" as test value in this research. One Sample T-Test has been conducted to reveal whether the students who have participated in the research show normal development in terms of their reading speed and results of the analysis are given in Table 5.

Table 5. One Sample T-Test results related to WCPM values

WCPM (V: 43)	N	M	SD	df	t	p	d
Narrative Text	60	36.88	18.65	59	-2.17	.034*	.28
Expository Text	60	34.03	18.95	59	-3.66	.001**	.47

Note. WCPM: Word Correct Per Minute, *p<.05, **p<.01

When Table 5 is reviewed, there is found a statistically significant difference between Hasbrouck&Tindal's norm value (WCPM=43) and students' word correct per minute in both narrative (M=36,88) text and expository (M=34.03) text ($t_{(59)}$ =-2.17, p<.05; $t_{(59)}$ = -3.66, p<.01). Students have read less number of words than normal value in both type of texts. Effect size value calculated as a result of study is small in narrative text (*d*=.28), and medium in expository text (*d*=.47). These results indicate that difference between norm value and effect size is larger in expository text.

3.3 Findings Related to Word Recognition Accuracy

When Table 6 is reviewed, it is seen that students have 76.34% (M=76.34) word recognition accuracy level in narrative text, and 75.67% word recognition accuracy level in expository text (M=75.67). Range and standard deviation values show that word recognition accuracy levels in both text types vary greatly in both text types.

Table 6. Descriptive statistics about word recognition accuracy

Text Types	M	SD	Min.	Max.
Narrative Text	76.34	18.65	18.0	99.0
Expository Text	75.67	17.98	25.0	98.0

When Figure 1 is reviewed, in terms of word recognition accuracy in narrative text, 71 percent of 1st grade students are at frustration level, 17 percent are at independent level and 12 percent are at instructional level. When Figure 2 is reviewed, in terms of word recognition accuracy in expository text, 79 percent of 1st grade students are at frustration level, 13 percent are at instructional level and 8 percent are at independent level. The majority of students are generally at frustration level in both text types.
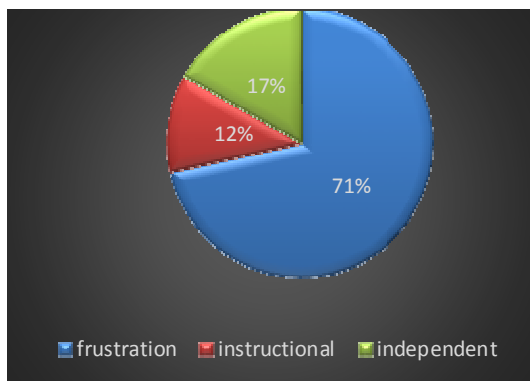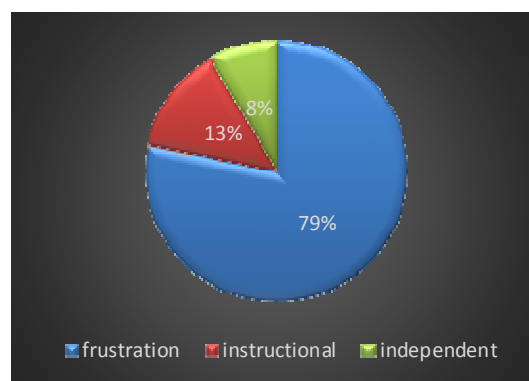

Figure 1. Reading Levels for Narrative Text

Figure 2. Reading Levels for Expository Text

3.4 Findings Related to Reading Errors

When Table 7 is reviewed, it is seen that 1st grade students make 480 errors in narrative text, and 483 errors in expository text. The most frequent errors made by student in narrative are respectively self correction (f=150), substitution (f=144) and insertion (f=79). The least frequent error is reversal (f=2). The most frequent errors in expository text are respectively insertion (f=139), substitution (f=134) and self correction (f=3). The least frequent error in expository text is reversal, just like in narrative text (f=2). When Figure 3 is reviewed, it appears that students' reading errors become more evident depending on text types. Especially, it attracts the attention that the number of insertion and self-correction errors greatly vary according to text types. The number of insertion errors is high in expository text; while the number of self-correction errors is high in narrative text (f=150).

Table 7. Number of reading errors students make according to text types

Error Types	Number of Errors (n)	
	Narrative Text	**Expository Text**
Omission	57	66
Insertion	79	139
Repetition	48	32
Self Correction	150	109
Substitution	144	134
Reversal	2	3
Total	480	483

3.5 Do Word Recognition Accuracy Levels in Narrative Text Differ Depending on Gender?
When Table 8 is reviewed, independent t-test results show that there is found no significant difference between male and female students' word recognition accuracy levels [$t_{(58)}$=-.645 p>,05]. In other words, gender variable does not affect word recognition accuracy in narrative text.

Table 8. T-test Results related to whether word recognition accuracy levels in narrative text differ depending on gender

WRC	N	M	SD	df	t	p
Female	33	74.61	14.18	58	-.645	.52
Male	27	77.75	21.75			

Note. WRC: Word Recognition Accuracy.

3.6 Do Word Recognition Accuracy Levels in Narrative Text Differ Depending on Gender?
When Table 9 is reviewed, independent sample t-test results show that there is found a statistically significant difference between male and female students' word recognition accuracy levels in expository text, in favor of male students [$t_{(58)}$=-2.349 p<.05]. Mean value of male students' word recognition accuracy (M=80.42) is higher than mean value of female students (M=69.86). In other words, male students read with more accuracy in expository text when compared to female students. As a result of test, effect size value is found to be medium (*d*=.6). This value indicates that there is a medium size difference between male and female students' accuracy scores.

Table 9. Independent Sample t-Test results related to whether word recognition accuracy levels in expository text differ depending on gender

WRC	N	M	SD	df	t	p	*d*
Female	33	69.86	16.52	58	-2.349	.02*	.6
Male	27	80.42	17.96				

Note. WRC: Word Recognition Accuracy. *p<.05

4. Result and Discussion

In this study, oral reading fluency of 1st grade students according to text types have been analyzed in detail in terms of word correct per minute (WCPM), word recognition accuracy (WRC) and reading errors. Also, findings have been compared to Hasbrouck & Tindal's (2006) oral reading fluency norm values and it is revealed whether there exists a significant difference. Additionally, word recognition accuracy levels have been compared in terms of gender and results have been discussed with other study results which report the gender variable in school achievement.

When findings related to first and second research question, it is seen that 1st grade students' WCPM value is approximately 37 in narrative text and 34 in expository text. Compared to Hasbrouck & Tindal's (2006) oral reading fluency norms, 1st grade students have significantly lower reading fluency in both texts than threshold norm value (WCPM=43) for Spring term. Calculated effect size shows that the difference between observed value and norm value is small in narrative text (d=.28) and medium in expository text (d=.47). Those results reveal that 1st grade students are at alarm level in terms of oral reading fluency in both text types.

In theoretical and experimental studies, WCPM emerges as an accurate and strong predictor of general reading skill (Fuchs, et al., 2001). Many studies in literature make it so evident that there is a high correlation between reading comprehension and reading fluency (Kim, Petscher, Foorman, & Zhou, 2010; Kim, Wagner, & Foster, 2011; NICHD, 2000; Ridel, 2007; Roehrig, et al., 2008). However, 1st grade students' oral reading fluency which has been studied in this research has a particular importance. In fact, it is invaluable to assess 1st grade students' oral reading fluency in a scientific way (Coulter, Shavin, & Gichuru, 2009) for the purposes of ensuring future reading achievement and therefore general academic achievement (Kim, Wagner, & Lopez, 2012 ; Burns et al., 2002, 2011; Padeliadu & Antoniou, 2014; Benson, 2008; Adams,1990; Cutting &

Scarborough, 2006; Fuchs, et al.,2001) and identifying reading difficulties for making necessary intervention.

Within this context, some studies in literature reveal that oral reading fluency is an effective factor in terms of school achievement especially in the first years of school life. For instance, Padeliadu and Antoniou (2014) in their study with 9th grade Greek students investigated the correlation between word recognition and fluent reading skills. For 1st and 4th grade students, the correlation between basic reading skills and reading comprehension is found to be between .36 and .47; in other words, this correlation is at medium level; but it's gradually getting weaker in later grades. Benson (2008) analyzed the relation between reading comprehension and fluency by using study sample from 1st grade to 12th grade. As a result of research, it was observed that there existed a strong and direct effect between these two variables until 3rd grade; however, the correlation decreased from medium level to small level after 4th grade.

When literature is reviewed, it is observed that similar findings have been found in many studies in terms of oral reading fluency. As stated by Boily, Quellet and Turcotte (2015), it is reported in a research done by National Ministry of Education in Burkina Faso -an African country- that only 9 percent out of 512 second graders can read fluently. In United States of America, a research with 5796 second graders reveal that nearly half of students (%43,8) remain below 53 which is accepted normal value in terms of WCPM (Wang, Algozzine, Ma, & Porfeli, 2011).

When findings related to another research question are analyzed, it comes out that 1st grade readers have word recognition accuracy, they read with 76.34% accuracy in narrative text, and 75.67% accuracy in expository text. Like WCPM, WCR value has an important function in evaluation of oral reading fluency. According to students' oral reading fluency, WCR values are used as a base while determining reading levels. According to Rasinski &Hoffman (2003), WCR value is evaluated as the following: 95% and above is independent, between 90% and 94% is instruction, 90% below is frustration level. In this research, in terms of WCR value, 71 percent of participants are at frustration level in narrative text, 17 percent of students are at independent level and 12 percent of students are at instructional reading level. In expository text, 79 percent of students are frustration level, 13 percent of students are at instruction level and 8 percent of students are at independent level. It attracts attention that the majority of students are generally at frustration level in both text types in terms of reading accuracy. This result necessitates that teachers should make more effort to develop oral reading fluency at first grade in terms of reading achievement.

This result obtained from current study matches with result of another study in literature. In a study in USA which investigates the effect of oral reading fluency at 2nd grade on 3rd graders' reading skills (n=9562), it comes out that oral reading fluency is a stronger predictor than ethnicity is. It is found out in that study that more than 90 percent of students are at risk level in terms of 3rd grade reading performance (Salvador, Schoeneberger, Tingle, & Algozzine, 2012).

1st graders are substantially at frustration level in terms of reading level, therefore it becomes necessary to consider letter-naming fluency achieved in pre-school education and alphabet knowledge. Within this context, Yesil-Dagli's (2011) research results are remarkable which analyze the effect of word knowledge achieved in pre-school education, phonological awareness and letter-naming on explaining 1st graders' oral reading fluency and the most important predictors which explain 1st graders' oral reading fluency most are respectively letter-naming fluency, word knowledge and phonological awareness. It comes out that these three skills cumulatively explain 27 percent of variance related to oral reading fluency which is assessed at first grade. In another study, oral reading fluency of 59 first grade students with different ethnic groups have been monitored. As a result of study, letter-naming fluency in pre-school education emerges as the most important predictor of oral reading fluency development at first grade. Students with low letter-naming fluency in pre-school make a little progress in reading fluency at first grade (Stage, Sheppard, Davidson, & Browning, 2001).

When findings are reviewed in terms of reading errors and error types, it is seen that 1st grade students make similar number of errors in both text types. The most frequent errors student make in narrative text are self-correction, substitution and insertion. The least frequent error emerges as reversal. On the other hand, the most frequent errors students make in expository text are insertion, substitution and reversal. The least frequent error in expository text is reversal just like in narrative text. The most remarkable finding is that there is too much insertion error in expository text; and too much self-correction error in narrative text. These findings can be explained with the following reason: Students are familiar with narrative type; therefore, they have a demand for reading without focusing attention. When it comes to expository text, as there exists more complex and abstract words in expository text by its very nature, students have difficulty with reading the words when they read it for the first time.

When literature is reviewed, there is found no comparison study depending on text types in terms of reading error types. However, reading error types have been reported in many studies. For instance, Baydık, Ergül and Kudret (2012) in their research studied reading fluency problems of 3rd graders with reading difficulty; and these problems were identified as "reading without paying attention to punctuations, misreading the words, long lagging and slow reading, subtracting and inserting letters-syllables. Bay (2010) in his research evaluated first

reading education by using sound based sentence method and he found out that 1st grade students make mistakes such as "reading by tracking, reading too fast or slowly, not obeying the rules of reading, adjusting tone of voice while reading, reading with repetitions, bending down while reading, inability to control the breath". Pillai and Paramasivam (2014) studied with Malaysian 4th graders who had insufficient reading skills and they observed that the most frequent reading error was skipping (%39). Then, other errors were respectively substitutions, stopping, insertion and self-correction. They stated that in their data analysis, reversal error never existed. Also, in their analysis, there occurred no change in students' reading comprehension levels when their reading errors decreased. Additionally, in their study, Juliana and Abosi (2011) identified errors most frequently made by 3rd grade students with low reading skills when they make oral readings and these errors were listed as "substitutions, mispronunciation and refusing to read". Also, participants made no reversal reading error.

As a result of study, there is found significant difference between male and female students' WCR scores in expository text; however, there is no difference in expository text. When literature is reviewed, there is no overall consensus in reading studies related to gender difference; however, there are more studies which find out that females show better performance compared to males (Wang, et al., 2011; Aikens & Barbarin, 2008; Berninger, et al.,2006; Chatterji, 2006; Logan & Johnston, 2009; McCoach, O'Connell, Reis, & Levitt, 2006; Mullis et al., 2007). For instance, a recent study was conducted by Vlachos et al. (2013) in order to see to what extent developmental dyslexia occurs among Greek secondary school students (n=598) and whether there is a difference depending on gender. As a result of study, it came out that 5.52 percent of students were dyslexic. Statistical analysis showed that dyslexia was double times more common in males compared to females. There are other studies which are similar to result of this study. For instance, Wang, Algozzine, Ma and Porfeli (2011) evaluated oral reading fluency performance of 5,796 secondary students in Fall, Spring and Winter term. As a result of study, female students got higher performances than males in reading achievement test at individual level. However, there is found no significant difference in development rates between male and females during second grade. Reynolds et al. (1996) in their study revealed that there was no significant difference in oral reading performances of twins. In reading studies which report gender differences, as it is discussed above-evaluations are generally made in terms of reading difficulty prevalence. Therefore, there might be produced different results by different studies, just like in this research.

When findings of this research depending on text type are considered, it's observed that 1st grade readers are better in narrative text in terms of WCPM and WCR scores. There are many studies in literature supporting this result. In fact, students in those studies state that they find it easier and more comprehensible to read narrative texts than expository texts during reading process (Best, Floyd, & McNamara, 2008; Diakidoy, Stylianou, Karefillidou, & Papageorgiou, 2005). However, there exists one research study which does not support this result. In a research by Cervetti, Bravo, Hiebert, Pearson and Jaynes (2009), they identified that modifying the same subject with narrative or expository text type did not affect students' reading speed and accuracy. In current research, it is though that the reason for readers to show better performance in narrative text structure can be explained by the fact that students are familiar with this type of text in pre-school education.

5. Limitations and future research directions
This research has some certain limitations. This study is conducted with sixty 1st grade students chosen randomly from three primary schools with medium socio-economic level. Oral reading fluency has been analyzed in terms of word correct per minute and word recognition accuracy; however, prosody is left out of scope of this study. As there is no sufficient number of studies related to 1st grade students' reading skills, there is felt a need for more research which would be conducted with larger number of students and multiple variables.

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