Fluency and Comprehension of Expository Texts in Turkish Students in Grades Four through Eight

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Abstract

The present study attempted to extend knowledge of the role of reading fluency in contributing to reading comprehension of expository texts among Turkish students in grades four through eight. One hundred students at each grade level were administered assessments of two measures of reading fluency, word recognition automaticity and prosody, and silent reading comprehension. Word recognition automaticity was found to be a significant predictor of comprehension at all grade levels tested. Prosody predicted comprehension at all grades levels as well except for grades 4 and 5. Regression analyses at each grade level indicates that, except for grades 4 and 5, word recognition automaticity and prosody together contribute to the prediction of reading comprehension. The magnitude of fluency's prediction of comprehension ranged from approximately a quarter to a third of the variance in comprehension. The results are discussed in terms of policy and instructional changes that may be considered in reading instruction for Turkish students.

Introduction

Successful reading instruction requires mastery of certain scientifically verified reading competencies. One of those competencies is reading fluency. Despite its relative neglect in school literacy curricula (Allington, 1983; Rasinski, Paige, & Nageldinger, 2015) reading fluency has been well established as a critical element of successful school reading curricula in English since the comprehensive review of reading research conducted by the National Reading Panel (2000). More recent scholarly reviews of research into reading fluency (Chard, Vaughn, & Tyler, 2002; Kuhn., Schwanenflugel, & Meisinger, 2010; Rasinski, Reutzel, Chard, & Linan-Thompson, 2011) reinforce the importance of reading fluency as foundational for reading growth and that it is a competency that should be mastered in the elementary grades. Research has further demonstrated that reading fluency is highly correlated with a primary goal of reading – silent and oral reading comprehension (Daane, Campbell, Grigg, Goodman, & Oranje, 2005; Miller & Schwanenflugel, 2008; Pinnell et al., 1995; Wiley & Deno, 2005). Thus, reading fluency is well established in the reading of English as an important contributor to comprehension, overall reading achievement, and school success (Lane et al., 2008).

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Examining students who perform poorly in high stakes tests of reading achievement in the United States, research has found that approximately 75% of such students demonstrate difficulty in one or more components of reading fluency (word recognition accuracy – often considered a separate component, word recognition automaticity, and reading prosody) (Valencia & Buly, 2004). Although reading fluency is often considered a competency mastered in the early stages of reading development (primary grades) (Chall, 1996), recent research has demonstrated that many English speaking students in the middle and secondary grades continue to struggle in reading fluency; moreover, fluency continues to be highly correlated with overall reading proficiency in the middle and secondary grades (Paige, Magpuri-Lavell, Rasinski, & Smith, 2013; Paige, Rasinski, & Magpuri-Lavell, 2012; Rasinski et al., 2005). Indeed, Rasinski and colleagues (Rasinski et al., 2017) found that a measure of reading fluency (word recognition automaticity) was significantly correlated with performance on an English language college entrance examination. More fluent readers tended to perform at higher levels of proficiency on the college entrances examination than less fluent reader.

Reading fluency consists of two major components – automatic word recognition, and expressiveness in oral reading (Rasinski, 2010). (Earlier we mentioned word recognition accuracy as a component of fluency. However, most models of reading treat accuracy as a separate component). Automatic word recognition refers to ability of readers to decode words so effortlessly that their attention is directed to comprehension, the ultimate goal of reading. Readers who are not automatic in their word recognition must use their cognitive resources for word decoding which then reduces the amount of those resources that can be devoted to comprehension. Accurate word decoding is a necessary but not sufficient condition for proficient reading. Word recognition must also be automatic. Although phonics or word recognition instruction leads readers to accurately identifying words, the process of analyzing or "sounding a word" takes up a considerable amount of attention that could otherwise be devoted to comprehension. When automaticity, as well as accuracy, is achieved in word recognition readers can direct their finite amount of cognitive resources to comprehension of the text.

Fluent speakers and readers speak or read orally with appropriate expression that reflects and even enhances the meaning of the text (Rasinski, 2010; Rasinski, Padak, Linek, & Sturtevant, 1994).

This oral and expressive rendering of language when reading is the second component of reading fluency and is known as prosody. By reading with appropriate expression or prosody, the readers is reflecting and in some cases elaborating on the meaning of the text.

Research has found strong correlations between oral prosodic reading of English and silent reading comprehension of English texts. Readers who read with appropriate levels of prosody (expression, volume, phrasing, and/or pacing) when reading orally tend to be the best comprehenders when reading silently. Moreover, as readers decline in their oral reading expression, their silent reading comprehension correspondingly declines as well. This connection has been found for students from the elementary grades through high school (Daane et al., 2005; Pinnell et al., 1995; Rasinski, Rikli, & Johnston, 1999). Prosody, or expression is easily measured – simply by listening to readers read orally and then rate their oral reading on a rubric that reflects expressive reading.

Fluency is important because it is a prerequisite to more sophisticated levels of reading – comprehension (Rasinski, 2012). Once students are able to read words in texts accurately, automatically and with expression (prosody) that reflects meaning, readers are more able to focus their cognitive resources on making meaning, comprehension, rather than on the more basic and foundational competency in reading – word recognition.

Despite the growing understanding and recognition of reading fluency in reading English, it continues to be viewed as a less than importance competency in reading English by reading scholars and practitioners (Cassidy & Grote-Garcia, 2013, 2014). Perhaps because of this lack of emphasis in reading fluency in the reading of English, the role and understanding of reading fluency in the reading of other languages continues to be limited. The present study examines the role of reading fluency and reading comprehension in Turkish.

Reading is one of the learning domains in the national language arts curriculum for the elementary grades in Turkey. The Turkish language arts course of study takes account of constructivism, student-centered learning approaches, individual differences, multiple intelligences, brain compatible learning, skill and thematic based learning. Reading instruction for elementary students includes teaching foundational reading competencies first. In grades ranging from 2 to 4, the curriculum focuses on the learning outcomes related to reading comprehension and higher-level thinking skills (Republic of Turkey Ministry of National Education [MEB], 2015). However, reading fluency has only recently received some degree of attention in the Turkish language arts course of study. Given the recent consideration to fluency, there does not exist a solid body of research that explores this competency in Turkish children. In addition, the previous elementary school curricula in Turkish language arts in Turkey have not put sufficient stress on reading fluency. Compared to the previous Turkish arts curricula curriculum, while the revised Turkish language arts curriculum (MEB, 2015) gives more attention to reading fluency, it may be the case that there continues to be a gap between the curriculum requirements and teachers' actual practices in classrooms related to reading fluency instruction. The low mean scores of Turkish students based on reading domain from Programme for International Student Assessment (PISA) indicates that the curriculum and the teaching practices do not support each other (Organisation for Economic Co-operation and Development [OECD], 2015).

Given the accepted recognition of the importance of fluency in reading and its lack of research among students in Turkey, it is clear that there is a need for research focusing on fluency, its various components, as it impacts reading comprehension in Turkish students exists. Considering the literature relevant to reading fluency in Turkey, although there have been a limited number of studies investigating reading fluency components and reading comprehension in elementary school grades (Bastuğ & Akyol, 2012; Kaya & Yıldırım, 2016; Yıldız, Yıldırım, Ateş, & Çetinkaya, 2009; Yıldız et al., 2014; Yıldırım & Ateş, 2012; Yıldırım & Rasinski, 2014), those studies have not focused on the developmental processes and relationships between reading fluency components and reading comprehension from the elementary to middle grades, and they have not focused on the role of reading fluency on reading expository texts.

There have been no studies of the role of reading fluency in expository or informational texts. The current body of research related to fluency has, to the best of our knowledge, focused exclusively on narrative texts. Expository texts are different from narrative in that their purpose is to convey information rather than to tell a story. Moreover, the structures of expository texts vary (Grabe, 2002; Pyle et al., 2017) and are generally different from the text structures normally found in narrative. Thus, reading expository texts is qualitatively different from reading narrative texts. Given the different nature of expository texts, does reading fluency hold the same importance as in narrative texts? Our aim with the present study is to determine the extent to which reading fluency is an important component of reading expository texts as it is in reading narrative texts.

Expository texts are gaining importance in reading education. Reading scholars have noted that as students move beyond the primary grades an increasing amount of the material they are required to read is informational as students move into disciplinary studies and disciplinary reading, most of which is informational. Standards movement such as the Common Core State Standards Initiative (2016) in the United States have given informational text equal primacy with narrative texts in the early elementary grades.

Acknowledging the increasing importance of informational or expository texts in school curricula, as well as the differing purpose and nature of expository versus narrative texts, it seems incumbent on reading researchers to explore the role of reading fluency, a salient factor found for reading narrative texts, in reading informational texts. The present study is an initial attempt to explore this area or reading.

Purpose and Method

The present research study investigated the relationship between components of reading fluency and reading comprehension. The main research question addressed in this investigation is the following:

What are the relationships among components of reading fluency and reading comprehension of expository texts in Turkish students in grades 4, 5, 6, 7, and 8?

Participants

The present study aimed to explore the relations among the components of reading fluency and expository reading comprehension among Turkish students. A total of 100 students from every grade level ranging 4th to 8th were enrolled in the study. This research took place in fall semester, 2015, in Turkey's Denizli province. The participants from the all grade levels were willing and available to take part in the present study. Informed consent letters were obtained from all of the participants and their parents or guardians. The participants were relatively homogenous and of middle socioeconomic (SES) status. They ranged in age from 10 through 15 years. The participants were not identified as learning disabled and their reading development was felt to be within grade level expectations according to their classroom teachers and the school counselor. All of the participants in the research were considered typically developing readers by their teachers. The predominant language (native language) of the students from all grade levels was Turkish and the students were not fluent speakers of English.

Measures and Procedures

Students were asked to read a grade-appropriate expository text and answer a set of comprehension questions related to the texts. The texts for reading comprehension and the components of reading fluency from all grade levels were chosen from a collection of graded Turkish expository texts (Akyol, Yıldırım, Ateş, Çetinkaya, & Rasinski, 2014). The participants in the research read an expository text in every grade level ranging from 4 through 8 and answer the accompanying questions. The fourth grade expository text was about nutrition and human with 250-word. The fifth grade expository text, which was a 165-word, explained Turkish paper marbling which is called *Ebru* in Turkish. The sixth grade one was a 259-word and included the biographic information concerning Mimar Sinan who was the chief Ottoman architect. The seventh grade text was a 138-word and explained RNA transferring based on worm experiment conducted by James V. McConnell in 1960. The same text was also used for the eighth grade students. We employed measures of reading comprehension, developed by the authors of the present study in Turkish. Twelve comprehension questions were prepared for every text, of which half were literal and half inferential. Every test consisted of 12 questions included multiple-choice and open-ended questions. The actual student reading had a fixed time condition, as previous research has shown that additional/unlimited time did not enhance the performance of nondisabled students and fixed time limits allowed ample time for the great majority of students to complete the test (e. g. Alster, 1997; Bridgeman, Trapani, & Curley, 2004).

Prior to the study, the texts and accompanying questions were reviewed by the experts in reading education to the extent to which the texts adequately corresponded to reading domain objectives of the grade levels Turkish language arts curriculum and the questions adequately measured comprehension of the texts. The experts also verified that each comprehension question was appropriate to test development standards and the students' reading levels. Correct responses to each question were scored as 1 point, and incorrect answers were scored as 0 points. Total scores ranged from 0 to 12. In the present study, we used Kuder-Richardson Formula 20 (KR20) as a measure of internal consistency reliability for measures with dichotomous choices. Although Cronbach's alpha is usually used for scores that fall along a continuum, it will produce the same results as KR20 with dichotomous data (0 or 1) (Cortina, 1993; Kuder & Richardson, 1937; Tabachnick & Fidell, 2007). The comprehension tests' internal consistency reliabilities ranged from .71 to .74 KR20 coefficients for the total of 12 questions. This coefficient values indicated that the scores obtained from the comprehension tests had acceptable internal consistency and the scores of the students from the tests had a homogeneous construct.

Students were tested individually and asked to read orally the passage corresponding to their grade level placement. The students were asked to read the text in their best or most expressive voice and were told that they would be asked questions about what they had read following their reading. During the oral reading, the researcher administering the test marked any uncorrected word recognition errors made by the student as well as marking the text position of the student at the end of one minute of reading in order to determine reading rate, a measure of word recognition automaticity. Prosody or expressive reading, a second element of fluency, was measured by independent evaluators listening to the student reading of the grade-level text and then rating the prosodic quality of the oral reading using a multi-dimensional fluency scale or rubric that describes levels of competency on various elements of prosody: expression and volume, phrasing, smoothness, and pace (Rasinski, 2004a). The rubric was developed by Zutell and Rasinski (1991), elaborated by Rasinski (2004b), and adapted by Yıldız ve diğerleri (2009) for Turkish students. Oral reading fluency rubrics have been identified as reasonable, valid, and reliable ways to assess students' prosodic reading (Kuhn et al., 2010; Miller & Schwanenflugel, 2006).

Previous research with readers of English has demonstrated the rubric to be a reliable and valid measure of prosody (Moser, Sudweeks, Morrison, & Wilcox, 2014; Paige et al., 2012; Rasinski, Homan, & Biggs, 2009). The Turkish adaptation of the scale has the following four main dimensions: (a) expression and volume, (b) phrasing, (c) smoothness, and (d) pace. Students' scores can range between a minimum of 4 and a maximum of 16.

Results

Data obtained from the students' reading or expository texts included measures of word recognition automaticity (words read correctly per minute), prosody (rating of expressiveness using the multi-dimensional fluency scale – scores ranged from 4-16), and answers to comprehension questions (scores ranged from 0-12). Means and standard deviations by for the three variables are presented in Table 1.

Table 1. Means and Standard Deviations for Word Recognition Automaticity, Prosody, and Comprehension by Grade Level

Grade		*N*	*M*	*SD*
4	Comprehension	100.	4.86	1.63
	Prosody	100	13.52	1.90
	Automaticity	100	99.77	20.24
5	Comprehension	100	4.07	1.69
	Prosody	100	11.16	2.74
	Automaticity	100	106.42	25.78
6	Comprehension	100	3.73	2.17
	Prosody	100	12.87	2.26
	Automaticity	100	111.42	27.57
7	Comprehension	100	3.63	1.92
	Prosody	100	11.89	2.81
	Automaticity	100	92.47	25.68
8	Comprehension	100	4.84	1.53
	Prosody	100	11.87	2.40
	Automaticity	100	128.36	31.16

In order to determine the relationship between measures of fluency and comprehension correlations were calculated among the key variables by grade level and are presented in Table 2. All correlations were found to be statistically significant and substantial.

Table 2. Correlations between Measures of Fluency and Comprehension

Grade	Automaticity-Comprehension	Prosody-Comprehension
4	.35**	.31**
5	.47**	.41**
6	.57**	.47**
7	.42**	.45**
8	.44**	.43**

Note. **$p<.01$

Given the robust correlations between the automaticity and prosody, the two components of fluency, we ran multiple regression analyses at each grade level to determine the combined relationship of the fluency variables and comprehension. Those results are presented below.

Table 3. Summary of Multiple Regression Analysis for Variables Predicting Reading Comprehension in Fourth Grade (N= 100)

Variable	B	SE B	β
Automaticity	.02	.01	.25*
Prosody	.14	.09	.14

Note. *$p<.05$

A multiple regression analysis was used to test the extent to which both prosody and automaticity combined predicted fourth grade students' reading comprehension. The results of the regression indicated that the independent variables of the model statistically predicted reading comprehension ($R^2 = .14$, $F (2, 97) = 7.905$, $p <.01$). While automaticity made statistically significantly contribution to the prediction of reading comprehension ($t = 2.244$, $p<.05$), reading prosody did not make a statistically significantly contribution to the prediction of reading comprehension ($t = 1.497$, $p>.05$).

Table 4. Summary of Multiple Regression Analysis for Variables Predicting Reading Comprehension in Fifth Grade (N= 100)

Variable	B	SE B	β
Automaticity	.02	.01	.35**
Prosody	.12	.07	.19

Note. *$p<.01$

A multiple regression analysis was used to test the extent to which both prosody and automaticity combined predicted the fifth grade students' reading comprehension. The results of the regression indicated that the independent variables of the model statistically predicted reading comprehension ($R^2 = .24$, $F (2, 97) = 15.455$, $p<.001$). While Automaticity made statistically significantly contribution to the prediction of reading comprehension ($t = 3.002$, $p<.01$), reading prosody did not make statistically significantly contribution to the prediction of reading comprehension ($t = 1.637$, $p>.05$).

Table 5. Summary of Multiple Regression Analysis for Variables Predicting Reading Comprehension in Sixth Grade (N= 100)

Variable	B	SE B	β
Automaticity	.03	.01	.45***
Prosody	.19	.09	.20*

Note. *$p<.05$.***$p<.001$.

A multiple regression analysis was used to test the extent to which both prosody and automaticity combined predicted the sixth grade students' reading comprehension. The results of the regression indicated that the independent variables of the model statistically predicted reading comprehension ($R^2 = .35$, $F (2, 97) = 26.380$, $p < .001$). Automaticity made a statistically significantly contribution to the prediction of reading comprehension ($t = 4.356$, $p<.001$). Prosody also made a statistically significantly contribution to the prediction of reading comprehension ($t = 1.933$, $p<.05$).

Table 6. Summary of Multiple Regression Analysis for Variables Predicting Reading Comprehension in Seventh Grade (N= 100)

Variable	B	SE B	β
Automaticity	.02	.01	.24*
Prosody	.21	.08	.31**

Note. *p<.05.***p<.001.

A multiple regression analysis was used to test the extent to which both prosody and automaticity combined predicted the seventh grade students' reading comprehension. The results of the regression indicated that the independent variables of the model statistically predicted reading comprehension ($R^2 = .24$, $F (2, 97) = 15.021$, $p < .001$). Automaticity not only made statistically significantly contribution to the prediction of reading comprehension ($t = 2.114$, $p<.05$) but also reading prosody made statistically significantly contribution to the prediction of reading comprehension ($t = 2.761$, $p<.01$).

Table 7. Summary of Multiple Regression Analysis for Variables Predicting Reading Comprehension in Eighth Grade (N= 100)

Variable	B	SE B	β
Automaticity	.01	.01	.29**
Prosody	.17	.07	.27*

Note. *p<.05.***p<.001.

A multiple regression analysis was used to test the extent to which both prosody and automaticity combined predicted the eighth grade students' reading comprehension. The results of the regression indicated that the independent variables of the model statistically predicted reading comprehension ($R^2 = .24$, $F (2, 97) = 15.658$, $p<.001$). Automaticity not only made statistically significantly contribution to the prediction of reading comprehension ($t = 2.709$, $p<.01$) but also reading prosody made statistically significantly contribution to the prediction of reading comprehension ($t = 2.538$, $p<.05$).

Discussion

The results of the present study offer valuable insights into the reading performance of the Turkish students reading expository texts. First and foremost, the results indicate that reading fluency, including both of its constituent elements, are substantially related to reading comprehension of expository texts (Table 2). Increases in reading fluency were associated with increased levels of reading comprehension. This finding correlates well with other research that has examined the role of fluency in reading narrative texts (Rasinski et al., 2011) and suggests that fluency is a reading competency that transcends text types and genre.

Regression analyses (Tables 3-7) indicate that the contribution of fluency to the prediction of reading comprehension ranged from 14 to 35%, and generally increased with grade level. Interestingly, despite models of reading development that suggest that fluency is a reading competency developed in the primary grades (Chall, 1996), the results of the present study suggest that the importance of fluency in predicting reading comprehension may actually become more significant as students move to more advanced grades. The present results suggest that fluency is a reading competency that continues to remain significant for Turkish students reading expository materials through grade 8, and given the magnitude of the correlations in grades 6 through 8, perhaps beyond. As students move from one grade

level to another, the difficulty and complexity of expository texts increase as well. As the difficulty of Turkish expository texts increases, the level of fluency required to read such texts with adequate comprehension also increases. Thus, it should not be surprising the fluency continues to be a salient variable beyond the primary grades and into the middle grades. The similar results can be seen in the study conducted by Bigozzi, Tarchi, Vagnoli, Valente, and Pinto (2017). Bigozzi et al. investigated the relations between reading fluency and school outcomes. The study revealed that reading fluency appears as a strong predictor affecting school outcomes in different subject areas across the grades ranging from grade 4 through grade nine. Also the other study (Ciuffo et al., 2017) stressed the importance of oral reading fluency in upper grade levels and showed that reading fluency remains as a strong predictor of older students' and young adults' reading comprehension.

Analyses of Turkish literacy curricula guides as well as observations of reading instruction in Turkish classrooms suggest that reading fluency, as in the United States (Allington, 1983; Cassidy & Grote-Garcia, 2013, 2014), is not an instructional priority. Students are taught to decode words accurately, but little attention is given to word recognition automaticity and even less to reading prosody (Ateş & Yıldırım, 2014, 2015; Yıldırım, Çetinkaya, & Ateş, 2013). Although correlation does not imply causation, given theoretical models of reading in which fluency is a contributor to comprehension in English as well as evidence from research into instruction in fluency and its positive impact on comprehension and overall reading achievement in English (Rasinski et al., 2011; Yıldırım, Rasinski, & Kaya, 2017), improvements in reading fluency among Turkish students in grades 4 through 8 reading expository texts are likely, at least at a theoretical level, to yield improvements in reading comprehension.

Multiple regression analyses (Tables 3-7) demonstrate that, except for grades 4 and 5, word recognition automaticity and prosody separately predict (or contribute to) students' reading comprehension. Again, this suggests that although both automaticity and prosody can be considered distinct, but related, elements of reading fluency and that they need to be part of any reading instruction curriculum for narrative and expository texts beyond the primary grades. Rasinki et al. (2017) contend that although it is true that fluency is a critical in the elementary grades, as students move through the middle grades, the texts they encountered become increasingly more complex, particularly complex expository texts and thus need for corresponding increases in fluency is apparent. Considering the present study results, the results of this study supports that reading fluency become the essence of reading comprehension in upper grades beyond elementary grades. Van de Ven, Voeten, Steenbeek-Planting, and Verhoeven (2017) investigated the post-primary reading fluency development of 1034 Dutch adolescents in expository text reading. The study results also showed that reading fluency emerges as a crucial variable in the adolescents' reading development.

The very nature of expository texts might suggest that prosody is less important than when reading narrative texts. Given that the purpose of expository texts is to communicate information, they are not generally written with a strong sense of voice that lends itself to oral prosodic interpretation. Yet, the results of the present study suggest that the relationship of prosody to comprehension is not appreciably different from reading narrative texts (Yıldırım et al., 2017). Thus, prosody should be a consideration when students' read expository material. Instructional models for teaching both automaticity and prosody concurrently are needed.

Overall, the present study demonstrates that reading fluency in Turkish, as in English, is a significant variable for predicting reading comprehension of expository materials in grades 4 through 8. As such, a reasonable implication for this conclusion is that reading fluency, both automaticity and prosody, need to be included in instructional programs for teaching reading of narrative (Yıldırım et al., 2017) and expository texts. Policy makers of reading curriculum guides in Turkey, as well as literacy specialists, school administrators, and teachers of reading in Turkey, need to examine the extent to which fluency is, or is not, included in Turkish reading curriculum in grades 4 through 8. If fluency has not been made a significant part of such curricula, then efforts should be made to make fluency or narrative and expository texts a more significant part of curricula in reading. Instructional protocols for

developing fluency are well established. These include modeling fluent reading by the teacher, assisted reading, and repeated reading (Rasinski, 1989; Rasinski et al., 2011). Research has demonstrated that instructional efforts to improve reading fluency result in improvements in fluency, comprehension, and overall reading achievement (Rasinski, 2012, 2017; Young & Rasinski, 2016). Efforts should be made to find ways to integrate these fluency building instructional methods into the reading and study of expository materials (Lee & Yoon, 2017) because the ability to read fluently and comprehend text is a primary foundation of daily functioning and academic achievement whatever text type or genre is and because unlike fluent readers, students who struggle with reading fluency continue to struggle throughout their schooling and are at greater risk of school failure (as cited in Sukhram & Monda-Amaya, 2017). In sum, there are consistent reports and conclusions about how to improve reading fluency across different grade levels and how to integrate effectively its instruction into curriculum. Taking these scientific research reports and their empirical evidence into account, it needs to be given more attention to the instruction of reading fluency skills.

As with most research, we need to acknowledge limitations to the present study. First, although the samples of students in the study are relatively large (n=100 per grade level), they represent students from one school which itself represents a very limited socio-economic segment in Turkey. Additionally, the grade level samples represent students for whom permission was granted by parents for their participation. Students were not included in the study if their parents did not provide permission. Our second limitation concerns the informational texts employed in study. While efforts were made to insure that the texts were good representations of grade level appropriate expository texts, the fact that students read only one passage limits our ability to generalize to other expository passages. These limitations can and should be addressed in future studies that include other samplings of students as well as other passages.

The primary purpose of the present study was to determine if reading fluency was associated with reading achievement in Turkish students reading of expository texts. The results of the study provide initial evidence that fluency in reading expository texts is an important theoretical and instructional variable in grades 4 through 8 and should be considered for inclusion in instructional reading curricula for Turkish students at those grade levels. Our hope, as a result of the present study, is that developing and implementing instruction for improving fluency in grades 4 through 8 will yield improvements in comprehension and overall reading achievement in the grades levels examined in the present study as well in grade levels beyond those examined in the present study. If students in grades 9 and above are less likely to manifest difficulties in reading fluency, it can be expected that their reading achievement as well as their learning in other areas of the school curricula will improve.

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