The Correlation Between Reading Fluency and Students' Reading Comprehension in Junior High School

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Abstract

Reading comprehension is the ability to comprehend the text. One of the factors that may affect it is reading fluency. Readers who can identify the words accurately and automatically may help to focus most of their attention on reading comprehension. Therefore, this study investigated the correlation between reading fluency and students' reading comprehension. This research used 64 7th-grade students as participants. Two instruments were used; a reading fluency test (CBM) and a reading comprehension test. This study showed 41 students were categorized as high risk (64%) in reading fluency. In reading comprehension, 27 students scored 56 – 70 (M = 60.0781), meaning that most students' reading comprehension skills were moderate. Then, the result of Pearson Product Moment showed that there is no relationship between reading fluency and students' reading comprehension at the Junior High School level (p–value = 0.102) since students are still trying to improve their reading skills. Then, students may feel anxiety about doing oral performance.

Keywords: *Junior High School; Reading comprehension; Reading fluency*

1. Introduction

Reading is a skill that everyone needs. There are many things we can get through reading, one of which is that we can get a lot of new information, idea, and knowledge (Fitria, 2019). The more they read, the more they will get many new things. According to (Lee & Chen, 2019), the ability to comprehend a text is the ultimate goal of reading. This ability is called reading comprehension. Based on (Kang & Shin, 2019), reading comprehension is the process of making meaning out of a text and depends on the reader's ability to read the text accurately and fluently. Through reading comprehension, we can get the meaning of the text we read and express it.

One of the aspects of the reading stated by Learning Point Associates (2004) is fluency. Fluency is the reader's ability to read text accurately and quickly (Pang et al., 2003). Yildirim et al. (2019) said that reading fluency is one of the underlying factors for reading comprehension. If the readers are not fluent in reading, they can't make connections and fully understand the reading. Reading fluency itself is a bridge from decoding skills to understanding (Makebo et al., 2022). Fluent readers can make focus most of their attention on reading comprehension. The reason is fluent readers can identify the words accurately and automatically. They can also connect the ideas in the text with their knowledge (Makebo et al., 2022). Therefore, reading fluency skills may help us accurately comprehend the text we read.

There are three essential components in reading fluency based on Rasinski et al. (2011). The components of reading fluency are accuracy in word decoding, automaticity in recognizing words, and appropriate use of prosody or meaningful oral expression while reading. Accuracy can help readers in word decoding. Automaticity in recognizing words if the reader is too slow will cause difficulties, so the reader will find problems building a sustainable interpretation of the text. Then, if the reader has poor prosody, it will confuse word groupings and apply inappropriate expressions. These components have a connection to text comprehension. Based on Yildirim et al. (2019), the components are good and significant indicators of reading fluency. In this case, it can be said that readers who are good at reading comprehension can benefit more from reading texts fluently.

There are several studies about reading fluency. Bilge & Kalenderoglu (2022) and Linnemann et al. (2022) state

that fluency skills have a relationship with reading comprehension and accuracy (writing fluency). It means reading fluency was correlated with reading and other skills, such as writing skills. Lee & Chen (2019) said that fluency in reading with vocabulary contributes independently to reading comprehension. This study found that poor vocabulary knowledge would make it difficult for readers to understand the contents of the reading text. It was also found that fluency is an essential component of reading skills. It means that fluency cannot make the reader understand the contents of the reading text well. There are several other influencing factors, such as vocabulary. In another previous study, Uysal & Bilge (2018) stated that there is a relationship between reading fluency and reading comprehension based on the type of text (informative and narrative). Reading fluency is an essential component affecting a person's reading ability.

Based on those previous studies, reading fluency seems to have a relationship with several other variables besides reading, such as writing fluency, speaking, and vocabulary. It means that reading fluency believes as an essential thing in learning English. Therefore, knowing whether a correlation between reading fluency and reading comprehension applies the same result to a different context is important, related to the material and the participants. Related to the reading material, this research used descriptive text because this material has not been used in previous studies. Uysal & Bilge (2018) used informative and narrative text as their reading material, so this current study used descriptive text to test students' reading fluency. In addition, more studies were needed to explore more participants using different participants and may find different results in this current research since the previous studies used Turkish and French students as participants (Bilge & Kalenderoglu, 2022; Lee & Chen, 2019). Thus, the researcher used Indonesian students as a participant to know whether there is a relationship between reading fluency and students' reading comprehension. Specifically, according to Paige & Magpuri-Lavell (2014), the challenges with fluent reading extend to middle and secondary grades, so this current research used 7th-grade students as participants because they belong to middle grades. So, this current research tries to determine students' reading fluency and comprehension. Then, the researcher investigates the correlation between reading fluency and students' reading comprehension in Junior High School.

Reading Comprehension

Reading comprehension is reading with understanding and thinking to understand the implicit content of the text, according to Serravallo (2015). Another researcher also states that reading comprehension is the process of making meaning of the text (Woolley, 2011). It means understanding the text we read. We must know the meaning of the text, so it can be said that reading comprehension is the goal of reading activities.

According to Olviyanti et al. (2017), five components are contained in reading texts. These components are related to each other so that they can make readers understand the contents of the text they read properly. They are; (1) Finding the main idea, (2) Finding detailed information, (3) Finding the meaning of vocabulary in context, (4) Identifying references, (5) Making inference

Reading Fluency

Reading fluency is one of the skills in reading which is important for students. According to Hudson et al. (2005), reading fluency is a new recognition as something important from a reading program for students who struggle with reading. This ability is very important for students to understand a text. They are said if they don't have this ability or can't read the text fluently as poor readers. Furthermore, Rasinski, (2004) said that reading fluency is a person's ability to read accurately, use appropriate speed, and use the correct expressions. Students with good reading fluency skills will be able to understand reading content accurately and correctly. Then, three important components of reading fluency must be considered. They are accuracy in word decoding, automaticity in recognizing words, and appropriate use of prosody (Hudson et al., 2005; Prima & Karma, 2017; Rasinski et al., 2011).
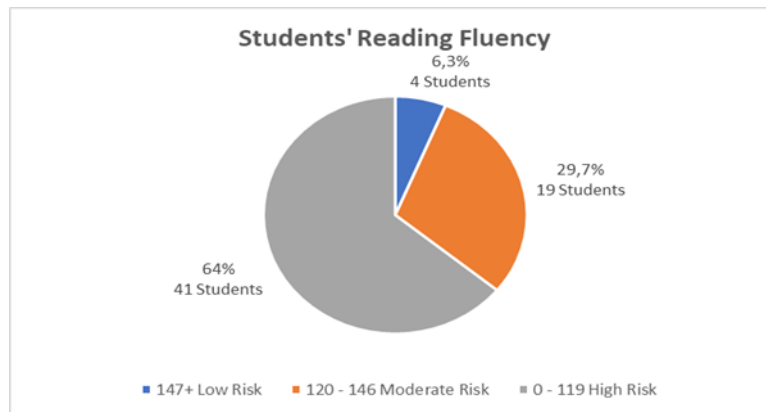
2. Method

This current research used a correlational design to determine whether there is a correlation between reading fluency and students' reading comprehension. The researchers used convenience sampling to choose the participants. The participants were 64 7th-grade students. These students have been taught about descriptive text used as reading material in this research. To collect the data, the researcher used two instruments; the Oral reading fluency test and the Reading comprehension test. The first instrument was Oral Reading Fluency Test. This test measures reading fluency adapted from Curriculum-Based Measurement (CBM). According to Wright, (1992), CBM is a powerful assessment tool to measure mastery of basic skills. Ja'afar (2016) also used CBM to find out students reading fluency. In this test, students read aloud; they read a text with a word count of about 250 words in one minute. The score is based on two aspects: the total number of words read by students in a minute and how many errors they made concerning five aspects: mispronunciation, word substitution, omissions, reversals, and hesitations for more than 3 seconds. The score was from the total number of words read reduced by the total errors made by students. Then the second instrument was Reading Comprehension test. This test was adopted from Bank Soal (a set of calibrated (tested) items, both theoretically and empirically, and contains important information) to determine students' reading comprehension. It measures students' reading comprehension in 7th grade. The type of this text is in the form of multiple choice with 35 questions about reading comprehension containing ten reading texts.

3. Findings and Discussion

Students' Reading Fluency

In students' reading fluency, the result of the test was categorized into three levels, which are low risk (147+), moderate risk (120 – 146), and high risk (0 – 119). The result of students' reading fluency was classified as follows:

Students' Reading Fluency

6,3%
4 Students

29,7%
19 Students

64%
41 Students

■ 147+ Low Risk   ■ 120 - 146 Moderate Risk   ■ 0 - 119 High Risk

Figure 1. **The Category of Fluency** ... **Distribution and Students' Reading Scores**

Based on the result analysis of students' reading fluency scores, it showed that four students were categorized as low risk (6,30%), nineteen students were categorized as moderate risk (29,70%), and forty-one students were categorized as high risk (64%). It means that most students (sixty students) still have difficulty in reading fluency.

During the test, most of the students had many mistakes in mispronunciation. The word most students always mispronounce in this research is 'kind.' Most of them always read 'kind' as 'kin'. It is in line with the research from Yang (2021), which stated that only seven out of one hundred achieved above 60% accuracy. Most students mispronounced in this research because they were unfamiliar with the vocabulary. It also stated that the participant faced unfamiliar words were the main difficulties in oral reading (Yang, 2021).

Especially for high-risk students, their mistakes also cover omissions and hesitations in reading fluency. In this research, most students often omit the article 'a' when reading. They think they must read as fast as they can in one minute. It is supported by Goodman (1973) that the cause of omissions is when readers read too quickly. While for hesitations, the students feel confused about how to read the word. Based on Huszti (2008) reason for the doubts, the students believed they were trying to decode the word following the pause. It shows that students have limited word skills and little idea about pronouncing English words (Pillai & Paramasivam, 2014).

Then, these three components, accuracy, automaticity, and prosody, in reading fluency can affect students' skills. Accuracy is the ability to decode words precisely. Aldhanhani & Abu-Ayyash, (2020) stated that readers must read accurately and identify individual words. In this research, most of the students made many mistakes in pronunciation. It means they still can't read the text accurately. Next, concerning automaticity, speed becomes the main aspect of word recognition automaticity (Meggiato et al., 2021). It means that students who read below a certain speed are accepted in the risk group. When some students read less than 100 words in a minute, they still have low reading or reading fluency speed, which can be said to be automaticity. The last component is prosody. Prosody is the reader's ability to read smoothly with expression and intonation that presents the meaning and comprehension of connected text (Rasinski et al., 2009). Based on Schwanenflugel et al. (2004), Students with good reading prosody have a fast and accurate reading ability. Yet, some of the students in this study hesitated when doing reading fluency tests. They can't continue to read to the next word in three seconds. It means that they are quite weak in reading prosody.

Students' Reading Comprehension

To find out students' reading comprehension. Sixty-four students did a reading comprehension test about descriptive text with 35 multiple-choice questions. The distribution of students' reading comprehension scores is presented in the following table.

Table 1. The Distribution of Students' Reading Comprehension Scores

Score	Frequency	Percentage
86 - 100	1	1,5%
71 - 85	15	23,4%
56 - 70	27	42,1%
41 - 55	14	22%
0 - 40	7	11%
Total	**64**	**100%**

Based on the result analysis of students' reading comprehension scores, showed that there were seven students (11%) got scores of 0 – 40, fourteen students got scores between 41 - 55 (22%), twenty-seven students got scores between 56 – 70 (42,1%), fifteen students (23,4%) got scores between 71 – 85, and one student got scores between 86 – 100 (1,5%).

Table 2. Descriptive Statistics of Students' Reading Comprehension

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Reading comprehension	64	20.00	91.00	60.0781	14.05692
Valid N (listwise)	64				

According to descriptive statistics, students' minimum score on the test was 20.00, and the maximum score was 91.00. Then, the mean score of students' reading comprehension score was 60.0781, which could be said that students' skill in reading comprehension is still moderate.

As presented in the result, students' average mean score in reading comprehension was 60.0781. It means that students still lack good reading comprehension; students' reading comprehension was still moderate. Based on Snow & Chair (2002), comprehension is simultaneously constructing and extracting meaning through interaction and engagement with print. It means that these aspects were interrelated to each other. This result also reflects that Indonesian students' reading performance is relatively low among other countries based on PISA 2018 RESULT. PISA (The Programme For International Student Assessment) is a program to measure achievement for 15 years old children in math, science, and literacy skills. Wijayanti (2020) also stated that students' reading literacy is still unsatisfactory.

The researcher used a reading comprehension test about the descriptive text in this research. This test covered multiple choice questions about identifying the main idea of the text, identifying the specific information, identifying the purpose of the text, identifying the meaning of unfamiliar words, and identifying the meaning of the words (reference).

In the test, students answered the most questions correctly about identifying the purpose of the text about animals. Fifty-seven students answered this question correctly. It means the students can identify the writer's reason for writing the text. Then, the students answered correctly about identifying specific information from the text. In these questions, fifty-four students answered the question correctly. Students use some keywords to find the answer from the text. It aligns with Olviyanti et al. (2017); students can find detailed information or scan it by searching for names or dates, finding definitions of key concepts, or listing some supporting details.

Then, many students answered incorrect questions about identifying specific information in the descriptive text of a person. Fifty-two students answered this question incorrectly. They were still unfamiliar with some vocabulary in the person's descriptive text. Then, students also answered many questions wrongly about identifying the main idea in the text. Fifty-one students answered this question incorrectly. The main idea is important information that tells more about the overall idea of a paragraph or section of a text (Kamlasari, 2017). Students couldn't get the main idea because of the lack of vocabulary. It is supported by Suwanaroa (2021) vocabulary becomes one of the main problems when it comes to reading. It means that readers with little vocabulary will face difficulties in reading.

Based on the test result, some possible aspects can affect readers' understanding. One of which is vocabulary. Most of the students still lack vocabulary knowledge in this test. They are still confused about the meaning of some words, so

they cannot answer the questions correctly. Susanto & Suhardianto (2018) stated that vocabulary knowledge is closely related to reading ability.

The Correlation Between Reading Fluency and Students' Reading Comprehension at the Junior High School Level

Pearson Product Moment Coefficient used to determine whether there is a correlation between reading fluency and students' reading comprehension. The analysis result is presented in the following table.

Table 3. Result Analysis of Measuring Correlation between Reading Fluency and Students' Reading Comprehension

Correlations

		Reading fluency	Reading comprehension
Reading fluency	Pearson Correlation	1	.206
	Sig. (2-tailed)		.102
	N	64	64
Reading comprehension	Pearson Correlation	.206	1
	Sig. (2-tailed)	.102	
	N	64	64

The analysis found that the p–value was 0.102 (> 0.05). According to Cohen et al. (2007), the analysis will show a significant correlation if the p-value is lower than 0.05. Since this current research found that the p-value was 0.102 (> 0.05), it is concluded that there is no correlation between reading fluency and students' reading comprehension in Junior High School.

This finding differs from research by Álvarez-Cañizo et al. (2020), who stated a correlation between reading fluency and reading comprehension in Spanish secondary students. In contrast, this research aligns with Magraw (2014) and Rath (2018). Research conducted by Rath (2018) states no specific correlation exists between oral reading fluency and reading comprehension.

The participants were 7th-grade students. During the reading comprehension test, they focus on reading accurately. It is similar to the research by Álvarez-Cañizo et al. (2020). They said the relationship between reading comprehension and reading fluency depends on the student's grade. According to Álvarez-Cañizo et al. (2020), the first graders, comprehension was directly related to reading accuracy; they also took longer to read both texts. In contrast, the second graders' reading comprehension depended on speed reading. Therefore, they need to rely more on the prosody to understand the text because their reading level was lower than second graders.

In this current research, some students got high-risk reading fluency levels but good reading comprehension scores. It means the relationship between reading fluency and reading comprehension is more complex. According to Rath (2018) said that reading fluency and reading comprehension do tie together. Still, it was not enough to say a specific correlation exists between reading fluency and students' reading comprehension.

During the test, students still learn how to read English words and understand the meaning of the text they read. It means the students still tried to be fluent readers and improve their reading comprehension skills. It is in line with research conducted by Magraw (2014); the higher grades (third grade) are still working to be fluent and understand the meaning simultaneously. Students still try to balance their skills to become fluent readers and understand the text's meaning. So, it can be one of the factors why there is no correlation between reading fluency and students' reading comprehension.

Some students feel anxiety about reading the text in the reading fluency test. They worry that they can't perform well or get bad scores. It is supported by Pillai & Paramasivam (2014) learners may be anxious and reluctant to perform poorly in public because they fear being labelled a failure. Devaney (2012) also stated that learners tend to be anxious during the oral performance. Therefore, some of them could not show their best ability due to anxiety.

Then, using the small number of participants, the participants were 64 7th-grade students. According to Alwi (2012), using a larger number of participants in quantitative research will increase the accuracy and thoroughness of the results to be obtained in the research.

In sum, reading fluency and students' reading comprehension did not correlate with Junior High School students. In this current research, students' reading fluency doesn't affect their reading comprehension because they still balance their skills to be fluent readers and simultaneously improve their reading comprehension skills. They also feel anxious when doing the oral reading fluency test, making the reading fluency and reading comprehension scores different. Then, the small number of participants may affect the finding in this current research.

4. Conclusion

Based on the result, 7th-grade Junior High School students had low reading fluency. It showed that forty-one students were categorized as high-risk (64%). Most of the problems faced by students in reading fluency are pronunciation. Specifically, students at high risk had more difficulties with omissions and hesitations.

Then, similar to reading fluency, students also had moderate reading comprehension (M = 60.0781). It indicated that students still lack reading comprehension. Most of them had difficulty identifying the specific information in the descriptive text of a person and the main idea from the text.

This research investigates the correlation between reading fluency and students' reading comprehension at the Junior High school level. It indicated no relationship between reading fluency and students' reading comprehension at the Junior High School level because the p-output from the test was 0.012 (> 0.05). It happens because students still try to be fluent readers and improve their reading comprehension at the same time. Students may be anxious to perform orally in the reading fluency test and the small number of participants.

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