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THE CORRELATION BETWEEN STUDENTS' READING SPEED AND THEIR READING COMPREHENSION

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Abstract: Reading is an important language skill for success because it influences how students learn from written information; students must comprehend the content they read at the appropriate reading speed to study reading speed. Reading quicker allows one to absorb better what is being stated in the text; hence, the faster they read, the better they grasp what they have read. This study aimed to find a significant relationship between reading speed and reading comprehension among tenth-grade students at SMA Negeri 10 Denpasar in the academic year 2022-2023. The researcher acquired data for this study using a correlational investigation. The subjects of this research were 40 students in the tenth grade at SMA Negeri 10 Denpasar in the academic year 2022–2023. The researcher collected data using two instruments: a reading speed test and a reading comprehension exam. Furthermore, the study equipment was designed to obtain the necessary data. The SPSS 25.0 version for Windows was used to analyze the data, which included the normality test, homogeneity test, Pearson product-moment, and T-test. According to the Pearson Product Moment Analysis, there was a 0.259 correlation between reading speed and reading comprehension. It shows a correlation between reading speed and reading comprehension of tenth-grade students.

Keywords: reading, reading speed, reading comprehension

INTRODUCTION

There are four skills in English: speaking, writing, listening and reading. Listening and reading are receptive skills, but speaking and writing are productive skill. Reading is one of the four skills that should be taught since it is so important. Reading is an essential skill that serves as the foundation for future learning. If students need help reading and comprehend what they

read, they may have difficulty in the following years when more and more learning resources are made available in written English. According to (Agung, Andari, Krismayani, Putu, & Pramerta, 2022; Krismayani, 2022), reading is a message-receiving and problem-solving activity that improves power and flexibility, and it may be more so in practice. It means that students can read and learn information from any written language. Reading is a skill that may be used in many elements of a student's life (Krismayani & Menggo, 2022). Reading will help children understand language more readily. Reading teaches students how to locate every message in a text. Reading teaches students to think. As a result, it is an effective method for learning about new concepts, facts, and experiences.

Everyone reads at their rate, which might be fast or slow. Reading speed, also known as the rate of reading, is the rate at which a person reads; the speed specifies how many words per minute may be read. (Richards & Schmidt, 2013). Reading speed is classified into five categories: poor, normal, good, extraordinary, and amazing. Total words were divided by reading time to calculate reading rates. How fast someone reads depends on their drive, attention, and word recognition (Lobier, Dubois, & Valdois, 2013; Yildiz & Çetinkaya, 2017). That is, some incentive will make you want to read anything, increase your interest in the topic, and keep you reading in a pleasant mood. Then, focusing helps gain attention when reading by assisting the reader in avoiding distracting circumstances. Neither of these situations will work if the readers do not recognize the phrase. When reading, word recognition removes the need for readers to spell familiar terms, which is critical for understanding. To obtain a decent reading rate, all three characteristics must be satisfied.

Reading comprehension is the ability to present an overall understanding of the text by providing inferential and literal information, drawing conclusions, and connecting to one's own experience (Krismayani & Menggo, 2022). Reading slowly and excessively impedes understanding of the text. As a result, delayed reading hinders understanding (Mustikasari, 2020). However, if someone reads rapidly, they will soon understand what they are reading. When readers must repeat what they read, there will be repetition, especially if they read slowly. It takes time, and their minds are no longer concentrated. Reading speed is the rate at which you comprehend the material (Bell, 2001; Mustarihah, 2018). While reading comprehension is mainly concerned with the level of knowledge of the material, everyone's ability to read for comprehension varies, so there is some categorization score in reading comprehension to know students' reading comprehension degree.

In the research conducted by Gasella (2022) about the correlation between reading speed and students' reading comprehension, the hypothesis testing resulted in an r-value greater than 0.413 (0.806 > 0.413). The results determine whether the relationship between reading speed and students' reading comprehension is significant or not. It signifies that the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. Another research on using the speed reading technique on students' ability to comprehend a text conducted by Sirait, Hutauruk, & Herman (2020) found that the speed reading approach significantly impacted the student's capacity to grasp a book. It was discovered that t-test > t-table (1, 96 > 1, 67). Using a rapid reading strategy to improve students' comprehension of the material is very beneficial.

Based on the previous research, the researchers were interested in investigating whether there was any correlation between students' reading speed and their reading comprehension in the context of the X-grade students at SMA Negeri 10 Denpasar in the academic years 2022–

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2023. The researchers determined whether or not there is a substantial relationship between students' reading speed and comprehension. However, the researchers did not investigate the underlying causes of what was causing the reading speed and reading comprehension to be low or high.

RESEARCH METHOD

The researchers in this study used an ex-post facto research design based on a correlational research design to identify the broad framework of the current inquiry. Consequently, this study had two variables: a dependent variable and an independent variable. According to (Creswell, 1991), correlational research has two or more variables. A variable is a property or attribute of a person or organization that can be measured or observed by researchers and varies among the persons or organizations examined. Furthermore, because the current study discovers a significant association between students' reading speed and reading comprehension, correlational research is acceptable under these conditions.

The population were 320 students, and the researchers took 40 students as a sample. Random sampling is a sampling strategy in which each sample has an equal probability of being picked and is meant to reflect the total population impartially. In addition, to meet the stated aims of this study, the researchers created research instruments. The reading speed test was the first instrument. In this research, a reading speed test was administered to students to determine their reading speed scores. The researchers provided them with a detailed paper titled "Visiting Niagara Falls." The text is 2.881 words long. Students were given a text and told to read it quickly to determine their word-per-minute speed. While for the second instrument, the researchers administered the comprehension exam to determine the student's understanding score, which consists of 10 questions on the comprehension test from speed test text that students read. Students were given closed questions in true-false format.

Furthermore, the results of the reading comprehension test and the reading speed performed by the sample must be correct and adhere to the standards. As a result, an assessment scale must be created. Furthermore, the sample answers were analyzed using the rubric for measuring reading comprehension and the criteria for assessing reading speed, resulting in varied results depending on the scoring rubric employed by the researchers.

RESULT AND DISCUSSION

The researchers collected data from the sample students' reading speed and comprehension tests for this study. The research instruments were administered to samples drawn from the population of tenth-grade students at SMA Negeri 10 Denpasar in the academic year 2022/2023. 40 students were used as the sample of this study. The researcher used simple random sampling to conduct this research in tenth-grade classes that selected five students, with the sample chosen by the English teacher. Moreover, the researchers used a guided hypothesis that explicitly demonstrated a significant relationship between students' reading speed and

reading comprehension at SMA Negeri 10 Denpasar of the tenth grade in the academic year 2022-2023.

This research was conducted utilizing an ex-post facto research methodology and by standards such as the validity and reliability of the research tools. These two essential components ensure that the study data is as authentic and trustworthy as possible. The following research tools were used to test reading speed and comprehension. In the first instrument, the reading speed test, students read a descriptive text the researchers gave. Then the students read it according to their reading speed ability, and at the same time, the researchers calculated the time with a stopwatch. After students read the descriptive text, the second instrument, the reading comprehension test, is continued. Students are given closed questions in a yes-no format related to the text they read to measure students comprehension of reading.

The students' work was graded using an answer key and a scoring rubric. The researchers explained each test's rules as they did it and where the tests were given. The researchers investigated on October 17, 2022, for one week, giving the gadgets to the students and gathering data from the 40 samples. The researchers began the statistical analysis after rating the samples' work. In the current study, statistical analysis was divided into two stages: precondition analysis and hypothesis testing.

A normality test is used to examine whether or not the distribution of data in a set of data variables is normally distributed. The researchers utilized the SPSS 25 version for Windows to analyze the normality of the research in this study. According to the SPSS interpretation, a low significant value (less than 0.05) indicated that the data distribution deviated significantly from a normal distribution. In other words, if the significant value was greater than 0.05, the data might be categorized as normal. Furthermore, it was necessary to evaluate whether the data distribution for each variable was normalized. Furthermore, because the significance of the normality test from reading speed and reading comprehension was more significant than 0.05, the obtained data could be classified as normal. Furthermore, the analysis findings are reported in the table below.

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		40
Normal Parameters[b]	Mean	,0000000
	Std. Deviation	10,68970985
Most Extreme Differences	Absolute	,146
	Positive	,070
	Negative	-,146
Test Statistic		,146
Asymp. Sig. (2-tailed)		,032[c]
a. Test distribution is Normal. b. Calculated from data. c. Lilliefors Significance Correction.		

Table 1. Normality Test of Reading Speed and Reading Comprehension

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The reading speed and comprehension statistics were distributed regularly, according to the table above. It is clear from the value (Sig.) that it is more than 0.05. According to (Pallant, 2005), when the data result is more significant than 0.05, the data is regarded as normal. The one-sample Kolmogorov-Smirnov test normality test is based on the assumption that if the significance value (Sig.) is more significant than 0.05, the research data is normal. The significant value (Sig.) was 0.032, larger than 0.05, according to SPSS table 4.2 above. It was possible to determine that the data variables were regularly distributed.

After determining the normality of the variables, it went on to determine the homogeneity of the data. Homogeneity testing was performed to determine whether or not the data acquired from the sample was homogeneous. The researchers reached the following conclusion based on statistical computations helped by IBM SPSS Statistic 25 using the Test of Homogeneity of Variances:

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
reading speed and reading comprehension	Based on Mean	65,098	1	78	,000
	Based on Median	63,682	1	78	,000
	Based on the Median and with adjusted df	63,682	1	39,352	,000
	Based on trimmed mean	64,771	1	78	,000

Table 2. Test of Homogeneity of Variances

The value of (Sig.) is 0.000, as seen in the preceding table. When the homogeneity results are less than 0.05, the variances can be presumed homogeneous (Gray, 2012). The researchers used Levene's tests to determine if the groups had equal variance, where researchers can determine the data results based on their significance values. This means that the data acquired from the sample in this investigation was homogeneous.

The Pearson Product Moment Coefficient calculates the relationship between reading speed and reading comprehension. The Pearson correlation coefficient applies to ratio or interval variables, and it is also assumed that each pair of scores is regularly distributed. Then, the correlation coefficient abbreviated as "r," reflects the strength or weakness of the correlation between two variables. Pearson Product Moment Correlation was employed in this study to assess the data. Pearson's product-moment correlation, sometimes known as Pearson's "r", is a measure of the linear connection between two interchanging variables ranging from -1 to 1. Assuming the correlation product-moment, Pearson product-moment was employed to

determine the strength of the association between the variables. The researchers also used SPSS version 25 to ensure that the above computation produced the correct result. The following were the SPSS findings:

Correlations			
		Reading Speed	Reading Comprehension
Reading Speed	Pearson Correlation	1	,259
	Sig. (2-tailed)		,106
	N	40	40
Reading Comprehension	Pearson Correlation	,259	1
	Sig. (2-tailed)	,106	
	N	40	40

Table 3. Table of Correlation

The index value of correlation was found to be 0.259. The result of those two calculations (manual and SPSS) is the same. It means that there was no mismatch in the process of calculating data. To know the correlation between reading speed and reading comprehension, the researchers used the criteria as following the table:

The "*r*" score scale	**Interpretation of "*r*" Correlation**
0.800 – 1.00	Very high
0.600 – 0.800	High
0.400 – 0.600	Moderate
0.200 – 0.400	Low
0.00 – 0.200	Very low

Table 4. Indexes of Correlation

According to (Arikunto, 2010), this coefficient is in the low range of 0.200-0.400, indicating a low correlation between the two variables. Ha is not recognized since the r-value of the correlation is not greater than the r-value of the table ($r_{ecounted} > r_{table}$). The r value was discovered to be 0.259, while the r table of df (39) is 0.331. As a result, since 0.259 and 0.331, H_a has been rejected. Finally, there is no significant relationship between reading speed and reading comprehension for tenth-grade students at SMA Negeri 10 Denpasar.

The T-test is a statistical test used to compare two groups' means. The T-test was used to examine the extent to which the independent factors used in this study impacted the application of the dependent variables separately. Furthermore, the t-test was used to examine how the independent factors used in this study impacted the application of partially dependent variables separately. The logic behind this choice was as follows: if the significant value is larger than 0.05, the hypothesis is rejected; if the significance level is 0.05 or above, the hypothesis is accepted.

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In this study, the researcher employed the paired-sample test in t-testing. (Pallant, 2005) states that paired-sample T-tests can also be used when the researcher evaluates the same individual in response to two independent queries. Both dimensions should be evaluated on the same scale in this case. The following is the outcome of paired-sample t-testing of the data based on a statistical calculation using SPSS version 25:

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Reading Speed - Reading Comprehension	661,05000	153,41580	24,25717	611,98525	710,11475	27,252	39	,000

Table 5. paired-sample statistic

Checking table 5 of the paired-sample test, it can be seen that the t-test result is considerably accepted because of the 0.000< 0.05 used by (Pallant, 2005). Furthermore, the t-counted result in table 4.6 was 27.252, and the degree freedom result was 39. According to the table, the degree of freedom is 39, which equals 1.684. As a consequence, the t-counted result was 27.525.> 1.684. It indicates Ha has been accepted.

This research employed an ex-post facto research approach with a correlational design. The current study's data analysis led to the research findings. Based on the research data obtained in this study, the data analysis findings revealed a significant correlation between reading speed and reading comprehension. The statistical analysis revealed that students with higher reading speeds tended to master reading comprehension more than students with lower reading speeds. Reading speed was associated with the reading comprehension of tenth-grade students.

Furthermore, (Faliyanti, 2015; Furqon 2013) supported the current investigation. They observed a compelling correlation between the students' vocabulary proficiency and reading comprehension. It was consistent with the current study's findings, which linked vocabulary knowledge with reading comprehension. Both prior investigations validated the current study's research conclusions. In other words, these two researchers established a correlation between reading speed and reading comprehension. Several variables can influence reading speed issues, lowering students' reading comprehension, particularly when reading detailed language. When students increase their reading speed, they may put forth their best efforts and absorb the reading

content much more quickly. Furthermore, these studies might serve as a resource for future studies on a comparable problem.

According to (Afiyah, 2022), speed reading is a technique used to test a person's competence and speed when reading or digesting a material. In other words, the speed reading technique seeks to enhance, then balance, the reader's reading speed and comprehension. The method is meant to enhance both reading speed and comprehension. The researcher was more confident that both factors were associated as a result of the idea concerning vocabulary and reading comprehension. The current investigation found that reading speed and comprehension were consistent with the notion. It suggests a substantial relationship between reading speed and reading comprehension.

According to the research findings, most samples could comprehend reading comprehension that satisfied the following criteria: understanding what they had read based on each student's reading speed ability. However, throughout the data collection process, the researcher made some surprising discoveries concerning the selection of responses from the samples. Most highly readable samples in reading speed tests can more simply and rapidly answer closed questions in true-false or yes-no format tests of descriptive text. They might also fulfil their responsibilities without consulting their colleagues. On the other hand, samples with low reading speed scores would need more time to react to the exam and would take longer to finish. Consequently, future researchers can apply their results to similar studies.

There is a significant correlation between reading speed and reading students' reading comprehension. It was evident from the hypothesis testing findings, which were generated using Pearson product-moment correlation and the T-test. This research supported the previous study, which found a correlation between reading speed and reading comprehension. The previously defined directional hypothesis was ultimately validated based on the research findings. In other words, there is a significant relationship between students' reading speed and reading comprehension in the academic year 2022-2023.

CONCLUSION

The reading speed and reading comprehension had a significant correlation which could be seen from the results of the hypothesis testing, which was made by using Pearson product-moment correlation and T-test. Based on the research findings, it can be concluded that the directional hypothesis previously determined was finally confirmed. In other words, there is a significant correlation between reading speed and reading comprehension of the tenth-grade students of SMA Negeri 10 Denpasar. The teachers are suggested to provide additional opportunities for students to practice their reading skills. As their reading skill improves, their reading comprehension will improve automatically. Then, the further researchers are encouraged to be more imaginative when developing instruments to obtain more reliable data. The success of this study can serve as a model for other researchers looking to conduct research.

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