THE CORRELATION BETWEEN THE SELF-DIRECTED LEARNING AND READING COMPREHENSION AT UNIVERSITAS RIAU

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Article Info

Received: 12 October 2022
Accepted: 23 February 2023
Published: 25 April 2023

Keywords

Correlation; self-directed learning; reading comprehension

Abstract

This research aimed to find out the correlation between self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau. The researchers used a descriptive quantitative method as the data approach. The samples of this research were 74 students from the fifth-semester students of the English department of FKIP Universitas Riau. The research instruments are a questionnaire and a test. The questionnaire is for the data on self-directed learning while the test is for the data on reading comprehension. To analyze the data, the researchers employed SPSS Statistics 25. The data analysis showed that the mean score of the student's self-directed learning is 215.18, classified as moderate level, while the mean score of the student's reading comprehension is 56.35, categorized as moderate level. Moreover, the research finding showed the correlation coefficient of the two variables is 0.694, indicating a positive and moderate correlation. Also, the determinant coefficient is 0.48 which implies self-directed learning has a 48% influence on the students' reading comprehension, leaving the other 52% to other factors. After finding that there is a moderate relationship between self-directed learning and reading comprehension, it is suggested that students should apply self-directed learning activities well, for it can result in better reading comprehension. This is mainly because self-directed learning gives them the freedom to choose their own reading materials and learning objectives.

INTRODUCTION

Students are an important part of the world of education, namely in the teaching and learning process. In Indonesia, a teacher oftentimes plays a leading role in the educational process (Zulfikar, 2009). They are the focus of attention at all times. Teacher-centered learning gives the students few options for improving their own choices about what and how they educate. As important as the teacher's role in educating students (Rindu & Ariyanti, 2017), students are still the ones that determine the success of education. Therefore, students must be involved in their learning process as they usually know what kind of learning suits their needs; hence self-directed learning.

According to Knowles (1975), self-directed learning is described as a process in which students take the initiative to identify their learning needs, formulate learning objectives, find material resources for learning, choose and put into practice effective learning strategies, and evaluate learning outcomes with or without the help of others. It is a powerful method of student-centered learning where the instructor's role is minimized since the learning activities are explored and developed by the students using quality resources that the teacher has supplied or access to through ICT (Hadriana et al., (2013). Most often, teachers serve as facilitators, mediators, and motivators. As a result of self-directed learning, students become adapted to managing themselves.

One of the four skills required to support communicative ability is reading. As claimed by Reiko Komiyama (2009) one of the most significant abilities for English language learners is the ability to read. As defined by Palani (2012), reading is a process of thinking, analyzing, judging, creating, reasoning, and solving issues. The success of reading depends on the knowledge received while doing it. Thus, reading is one of the most essential abilities in the process of learning English (Rohani, 2019). According to Rumbold (2006), in addition to personal and mental growth, reading is also critical for social, economic, and civic activity. Several researchers have discovered that poor English academic literacy, particularly poor English reading comprehension, is a global challenge (Muhammad, 2013).

Although there have been many ideas and techniques supporting students' reading skills for decades employed by educators, reading comprehension among Indonesian students remains low. This is based on a 2019 survey conducted by the Organization for Economic Co-operation and Development issued by the Program for International Student Assessment (PISA) in which Indonesia's literacy rate was ranked 62nd out of 70 countries. Owing to this, it is not surprising that many Indonesian students still struggle with reading comprehension, particularly in the English language (Sulistiyo, 2016; Setiyadi et al., 2016).

Even though they have studied English since the middle school level, the majority of Indonesian students still do not understand what they read in various English texts. In short, many EFL students find it challenging to understand English writing because they lack English vocabulary (Suryanto, 2017). In addition to a lack of vocabulary, they are also bored with conventional teacher learning methods and this makes them less motivated in learning to read

(Pradana, 2017). Furthermore, specifically at the higher education level, Elfiondri et al., (2020) also found that among all of the sections in the English test, reading comprehension is the hardest one for students. These difficulties in reading comprehension test the students are determining the main ideas, locate specific information, make inferences, understand the meaning of unfamiliar words, locate referents, and answer stated and unstated details (Elfiondri et al., 2020; D. Hidayati, 2018; Zarnis Yulvia, 2021). The most common reasons for students having these issues are not being interested in reading and lack of motivation (Septia et al., 2022).

Being that the students had been through online learning for a couple of years due to the Covid-19 pandemic, which means the students had to direct their own learning. As known in online learning, the students were the ones who took control of their study; they were the ones who decided what type of learning worked best for them and suited their own learning needs. Thus, it can be said that online learning is organically self-directed (Sun, et al., 2022). Relating it to reading comprehension, there are still not many researchers who have tried to study the relation between the two variables. A study by Khodabandehlou et al., (2012), for example, investigated the impact of self-directed learning on learners' reading comprehension. The results showed that self-directed learning did help students improve their reading comprehension if the students are aware of the reading goals. Simply put, they would be able to direct their own learning better if there were a reason for it to encourage them. Another study by Li et al., (2021) discovered that students with high self-directed learning ability frequently achieved better outcomes in English reading, similar to previous studies on online learning (Arnold Nike, 2009; Zhu & Doo, 2022). The online learning environment has overcome the limitations of time and space, giving students access to an abundance of reading materials and allowing them to read at their own pace, making it appropriate for self-directed learning (Tan, 2015). Owing to self-selected reading and goal setting, students are able to take ownership and responsibility for their learning, allowing them to choose the best method for them to increase their reading skills.\

Considering the importance of reading comprehension skills in English and the benefits of self-directed learning to it as explained above, the researchers were then interested in conducting a study about the correlation between these two. This is also because from the interview the researchers did with some of the fifth-semester students in the English department at Universitas Riau, it was found that the students' biggest issues in English tests, particularly the international standard one like TOEFL, are all related to reading skills despite them having studied many reading strategies throughout their college years. For this reason, this study is focused on answering whether or not students' self-directed learning correlate with their reading comprehension skills.

METHODOLOGY

This research is intended to investigate the correlation between self-directed learning and reading comprehension. The research design is correlational research; it is a type of quantitative approach. In correlational research, investigators used the correlational statistical test to

describe and measure the degree of association (or relationship) between two or more variables or set scores (Creswell, 2012). There are two variables in this research; self-directed learning and reading comprehension. The following are the hypotheses of this research.

1. The alternative hypothesis (Ha): There is a correlation between the self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau.
2. The null hypothesis (Ho): There is no correlation between the self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau.

This research was conducted at the English Study Program of FKIP Universitas Riau. The research data was collected online via Google Forms in August 2022. The populations were the fifth-semester students of the English department of FKIP Universitas Riau. The population of the research is the fifth-semester students of the English department at Universitas Riau. To determine the research samples, cluster random sampling was used (Sugiyono, 2009). In other words, the total population was divided into groups, and a random group of samples was selected. To do this, the researchers used a random picker application (Spin the Wheel). From the roll, class 5B and class 5C were selected as research samples. There are 36 students in class 5B and 38 students in class 5C, so in total, there are 74 research samples in this study.

There are two instruments used for collecting the data; the questionnaire and the test. The questionnaire was adapted from Williamson (2007) consisting of 60 items. The questionnaire on self-directed learning was used to measure the level of the students' self-directed learning. Meanwhile, to determine the level of students' reading comprehension, a test was utilized. The test is about reading comprehension containing 50 questions adapted from Peterson's Master TOEFL Reading Skills (Peterson, 2007).

After the data were collected, they were later analyzed using the Pearson Product-Moment formula via the computer program, IBM SPSS Statistics 25. The researchers first described the data of each variable before explaining the correlation analysis between the two variables as follows:

1. **The Normality Test.** Normality testing is used to see if the sample data came from a population with a normal distribution. In case the Asymp. Sig. value is higher than 0.05, the data distribution is normal, but if the Asymp. Sig. value is lower than 0.05, and the data distribution is not normal. These are the basic decisions in making a normality test.

2. **The Linearity Test.** Linearity testing is carried out to determine whether the relationship between variables is linear or not. If the value of deviation from linearity is higher than 0.05, the relationship between both variables is linear. However, if it is lower than 0.05, then the relationship between both variables is not linear.

3. **The Correlation Analysis:** This test analyzes two variables in order to discover their correlation and test the hypothesis. The researchers used the Pearson Product-Moment

through IBM SPSS Statistics 25. After that, the correlation coefficient was classified using the table of correlation levels suggested by Sugiyono (2009).

Table 1. The interpretation of Pearson correlation coefficient

Correlation Coefficient	Interpretations
0.00 – 0.20	Very low correlation
0.21 – 0.40	Low correlation
0.41 – 0.70	Moderate correlation
0.71 – 0.90	High correlation
0.91 – 1.00	Very high correlation

4. Determinant Coefficient: This test is to see the percentage of the students' self-directed learning influences on their reading comprehension. It can be seen in the following formula.

$$R = r^2 X\ 100\ \%$$

Notes:
R: Value of Determinant Coefficient
r: Value of the Squared Correlation Coefficient

FINDINGS

Descriptive Statistics Analysis

1. *Self-Directed Learning (X)*

Table 2. Descriptive statistics of self-directed learning

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Self-Directed Learning	74	97	174	271	215.18	26.040
Valid N	74					

Based on Table 2, it can be seen that the range score of the student's self-directed learning is 97. The lowest score is 174 while the highest one is 271. The mean score of the data is 215.18 while the standard deviation is 26.040. Following the categorization of the scoring range of the self-directed learning level by Williamson (2007) can be seen below:

Table 3. Classification of students' self-directed learning

Interval	Classification	Frequency	Percentage
60-140	Low	0	0

141-220	Moderate	43	58.11%
221-300	High	31	41.89%
Total		74	100%

From Table 3, it can be described that there are thirty-one students (41.89%) in the category of 'high' self-directed learning, forty-three students (58.11%) in the 'moderate' level of self-directed learning, and none of the students were in the 'low' of self-directed learning level. On the whole, with an average score of 215.18, it can be concluded that the self-directed learning level of the fifth-semester students of the English department of FKIP Universitas Riau is Moderate.

2. *Reading Comprehension (Y)*

Table 4. Descriptive statistics of reading comprehension

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Reading Comprehension	74	52	34	86	56.35	17.164
Valid N	74					

According to Table 4, the range score of the student's reading comprehension is 52. The lowest score is 34 while the highest one is 86. The mean score of the data is 56.35 while the standard deviation is 17.164. Following the categorization of ability level by Harris (1974), the category of the student's reading comprehension can be seen below:

Table 5. Classification of students' reading comprehension

Score	Category	Frequency	Percentages
81 – 100	Very Good	8	10.81%
61 – 80	Good	21	28.38%
41 – 60	Moderate	24	32.43%
21 – 40	Poor	21	28.38%
0 – 20	Very Poor	0	0
Total		74	100%

Based on Table 5, it can be described that out of 74 students, eight students (10.81%) are in the "very good" level class, twenty-one students (28.38%) are in the 'good' level class, twenty-four students (32.43%) is on the 'moderate' level class, and twenty-one students (28.38%) are in the 'poor' reading comprehension level class. And, there are no students who are on the 'very poor' level. With an average score of 56.35, it can be concluded that the reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau is Moderate.

Correlation Analysis

1. *The Normality Test*

To see if the sample data came from a population with a normal distribution, a normality test is needed. The following is the output of the normality test.

Table 6. Normality test output

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		74
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	12.35109728
Most Extreme Differences	Absolute	.100
	Positive	.100
	Negative	-.085
Test Statistic		.100
Asymp. Sig. (2-tailed)		**.062[c]**

According to Table 6, the Asymp. Sig. value is 0.062. The data is categorized as normal if the Asymp. Sig. value is higher than 0.05. As a result, the test distribution is greater than 0.05. That means the data distribution can be declared as normal.

2. *The Linearity Test*

Linearity test is a requirement in correlation analysis. Its purpose is to determine whether the relationship between variables is linear or not. The output of the linearity test can be seen below.

Table 7. Linearity test output

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Reading Comprehension * Self-Directed Learning	Between Groups	(Combined)	18683.532	49	381.297	3.241	.001
		Linearity	10370.744	1	10370.744	88.157	.000
		Deviation from Linearity	8312.788	48	173.183	1.472	**.154**
	Within Groups		2823.333	24	117.639		
	Total		21506.865	73			

Based on Table 7, the value of deviation from linearity is 0.154, which means it is higher than 0.05. Therefore, it can be confirmed that there is a linear relationship between self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau.

3. *The Correlation Analysis*

As previously stated, the purpose of this research is to find out the correlation between self-directed learning and reading comprehension. In order to do this, IBM SPSS Statistics 25 was used to statistically calculate the data from the two variables using the Pearson Product-Moment technique. The following table is the output of the correlation test between the two variables.

Table 8. Correlation analysis

Correlations

		Self-Directed Learning	Reading Comprehension
Self-Directed Learning	Pearson Correlation	1	**.694****
	Sig. (2-tailed)		.000
	N	74	74
Reading Comprehension	Pearson Correlation	**.694****	1
	Sig. (2-tailed)	.000	
	N	74	74

From Table 8 above, it can be seen that the correlation coefficient between self-directed learning and reading comprehension is 0.694. Using the correlation classification by Sugiyono (2009) the number is included in the range of moderate correlation category. Owing to this, it can be inferred that there is a moderate correlation between the self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau.

In addition, because the correlation coefficient is over 0 and closer to +1, that indicates that the correlation found is positive (Fenton & Neil, 2012). That means there is a positive correlation between self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau.

4. *Determinant Coefficient*

A determinant coefficient is necessary to see the percentage of the relationship between self-directed learning (X) and reading comprehension (Y).

$$R = r^2 \times 100\%$$

$$R = (0.694)^2 \text{ X } 100\%$$

$$R = 0.48 \text{ X } 100\%$$

$$R = \mathbf{48\ \%}$$

Based on the result of the coefficient of determination, self-directed learning contributes to reading comprehension by 48%. From that point, it can be determined that the other 52% of the student's reading comprehension is probably attributed to other factors that are not investigated in this research.

DISCUSSION

The study aimed to find out the correlation between self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau. The researchers employed two instruments in this research; a questionnaire and a reading comprehension test. The sample in this study consisted of 74 students. They were asked to fill out the questionnaire and answer the TOEFL test.

The first variable of the research is the students' self-directed learning. The data on this variable was obtained from the questionnaire. The results show that there are thirty-one students (41.89%) in the category of ‘ high’ self-directed learning, forty-three students (58.11%) in the ‘moderate’ level of self-directed learning, and none of the students were in the 'low' of self-directed learning level. As a whole, with an average score of 215.18, using a formula by Williamson (2007), this score is classified as moderate level. For this reason, it can be inferred that the fifth-semester students of the English department of FKIP Universitas Riau have a moderate level of self-directed learning.

The second variable is the student's reading comprehension. The data of this variable was gained from the reading test. The results that out of 74 students, eight students (10.81%) belong to the "very good" level class, twenty-one students (28.38%) are in the ‘good’ level class, twenty-four students (32.43%) belong to the ‘moderate’ level class, and twenty-one students (28.38%) is on the ‘poor’ reading comprehension level class. Fortunately, there are no students who are on the ‘very poor’ level. The average score of the student's reading comprehension is 56.35. Following the categorization of ability level by Harris (1974), the findings could be categorized as moderate level. Thus, it can be determined that the fifth-semester students of the English department of FKIP Universitas Riau are considered to have moderate reading comprehension skills.

The researchers employed IBM SPSS Statistic 25 for correlation analysis and hypothesis testing. According to the previous section, the correlation coefficient of the self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau is 0.694. This number, conforming to the correlation level by Sugiyono (2009) is considered a moderate level of correlation. With this finding, Ho is then

rejected and Ha is accepted. Also, because the coefficient is more than 0 and closer to +1, the correlation can be confirmed as positive. That means the two variables move in the same direction; the better students' self-directed learning is, the higher their reading comprehension skills will be.

A study by Hidayati (2016) also discovered a similar result. She found that there is a moderate correlation between students' self-directed learning and their reading achievement. The main reason is likely because of the way self-directed learning allows the students to pick their own reading materials and set their own reading goals. In addition, a study by Swatevacharkul (2017) also showed that self-directed learning is a successful educational strategy for improving adult learners' English reading comprehension. Reading ability is improved by self-directed learning in several ways, including increased awareness of reading strategy use, development of learning responsibility and effort, freedom to learn, and increased reading self-confidence. Another similar finding was discovered by Wichadee (2011). He found that the self-directed learning instructional model was able to improve all learning types. This is mainly because self-directed learning gives students the freedom to select their own reading material and learning goals.

In addition, the researchers also obtained the determination of the coefficient (r^2) of the correlation is 0.48. That means self-directed learning readiness at a moderate level was considered to have a 48% contribution toward the students' reading comprehension. Owing to this, it can be settled that the remaining 52% of the student's reading comprehension is influenced by other factors that are not investigated in this research.
To sum up, this research managed to prove that self-directed learning and reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau correlates with each other. This conclusion can be seen from the coefficient of correlation found being 0.694, which can be classified as a moderate correlation. It means that the better self-directed learning the students have, the better their reading comprehension will be. Additionally, the determinant coefficient between the two variables is 0.48. This number indicates that the student's self-directed learning has a 48% influence on their reading comprehension.

CONCLUSION

According to the findings of this research, the researchers draw a conclusion as follows: First, the analysis of the data from the questionnaire showed that the self-directed learning of the fifth-semester students of the English department of FKIP Universitas Riau is moderate. Simply put, the students have a moderate level of self-directed learning. Second, in accordance with the data analysis of the test, it was found that the reading comprehension of the fifth-semester students of the English department of FKIP Universitas Riau is classified as moderate. In other words, the students have moderate reading comprehension. Third, the correlation coefficient is moderate level, the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. So, it can be concluded that there is a moderate and positive correlation between self-directed learning and reading comprehension of the fifth-semester students of the

English department of FKIP Universitas Riau. And the coefficient of determination, the student's self-directed learning contributes about 48% to their reading comprehension, while the other 52% to other factors that are not investigated in this research.

SUGGESTIONS

The researchers propose suggestions based on the result and the conclusion of the research. For English students, the researchers would suggest and encourage them to start directing their own learning, especially for English reading, because according to the findings of this research, it was found that students' self-directed learning has a moderate influence on their reading comprehension; the higher their self-directed learning, the better their reading comprehension. For other researchers, the researchers would like to suggest that they continue to do further research on the relationship between self-directed learning and other parts of English learning. As we know, besides reading, there are other skills of English such as speaking, writing, and listening, that need to be mastered by English learners in general. Thus, self-directed learning can be applied in other areas of English learning to see whether it has the same influence on them or not.

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