

Global Reading, Problem-Solving, and Support Reading Strategies Across Worry, Emotionality, and Task-Generated Interference of Learners as Predictors of Reading Comprehension

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ARTICLE

ABSTRACT

*Reading comprehension,
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This research was conducted to investigate partially and simultaneously significant contributions between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension and the dominant predictor variable to reading comprehension with 540 learners at UIN Maulana Malik Ibrahim Malang. With the Multiple Linear Regression analysis, this study administered a reading comprehension test, SORS, and FLRAS questionnaires to collect the data. The results of the statistical calculation showed that *t* values of global reading (4.549), problem-solving (4.415), support reading (4.667), worry (2.721), emotionality (2.596), and task-generated interference (2.955) in which all were higher than *t* table (1.964), so there is a partially significant contribution between all of the predictor variables to reading comprehension. This study used the Multiple Linear Regression analysis to gather data by administering the SORS, FLRAS questionnaire, and reading comprehension test. The statistical analysis revealed a partially significant contribution between all predictor variables to reading comprehension, with *t*-values for global reading (4.549), problem-solving (4.415), support reading (4.667), worry (2.721), emotionality (2.596), and task-generated interference (2.955) all surpassing the *t*-table (1.964). A simultaneously significant contribution to reading comprehension was made by global reading, problem-solving, support reading, worry, emotionality, task-generated interference, and the computed *F* value of 18.195, which was higher than the *F* table (2.116). In addition, if the Standardized Coefficients Beta column was observed, the dominant variable in reading anxiety was task-generated interference, which had the highest value (.117) in reading anxiety, and the dominant variable in reading strategies, which was support reading, which also had the highest value (.187) of all predictor variables.

INTRODUCTION

Reading is a pivotal element of everyday existence, providing enjoyment and knowledge in various aspects of life. It involves understanding written messages, taking necessary information quickly and effectively, and consolidating knowledge. Reading skills in language teaching are intertwined with written language, as reading comprehension involves extracting and constructing meaning through interaction with the text. Reading is essential for all educational contexts, impacting vocabulary, spelling, and writing significantly. Therefore, reading skills are integral to language teaching and are essential for enhancing learners' vocabulary, spelling, and writing abilities.

In Industry 4.0, learners need to understand complex information and read extensively to access and share it. Reading is an essential part of academic life, as it helps students understand materials, write papers, and complete assignments. It also stimulates knowledge acquisition and exchange in language learning environments, making it a crucial part of learners' academic lives. Reading skill enhances knowledge of diverse topics, while a lack of comprehension can cause difficulties in various subjects.

Reading represents a skill that is essential for those studying foreign languages, especially for acquiring English as a Foreign Language (EFL). It involves developing reading and hearing abilities to comprehend diverse inputs in the early stages of language learning. However, the process can be complex, especially in a foreign language. Reading comprehension is an interactive and complex process influenced by linguistic, cognitive, socio-cultural, affective, and motivational factors. It involves interaction, thought, and cognition, as well as complex information processing, language comprehension, and receptive communicative behavior. Despite its complexity, reading EFL material has been considered a difficult activity due to the need for high-level thinking and control of cognitive processes, including reading skills, decoding process, vocabulary mastery, inference skills, and reading strategies. In 2015, Sanford's study identified reading comprehension as a complex process influenced by factors such as working memory, vocabulary, prior knowledge, word recognition, reading strategies, and motivation, among others.

Because reading is not easy, it can make readers anxious when reading especially when they do not master the target language in the reading text. Reading skills are needed to master every facet of language acquisition which include mastering grammar, mastering vocabulary, writing, speaking, revising, editing, and implementing computer-assisted language programs. In an academic setting, reading activities are usually made to help learners reach a particular reading comprehension level (Masduqi, 2014). Reading activities require conscious and subconscious thinking processes to understand the author's intentions, feelings, and points of view as reflected in his writing. Readers are asked to apply a series of strategies to reveal the implied or explicit written information in the reading text and recreate the author's meaning successfully.

Three theories can be used to comprehend the significance of words in written material, namely bottom-up theory, top-down theory, and interrogative theory. All of them are different from one another. The bottom-up theory takes place when the reader obtains information from the bottom. Readers comprehend the text by identifying the letter first. Then, it is followed by text structure identification, phrase identification, sentence identification, understanding the text discourse, and last, meaning identification. In the top-down theory, the meaning of the text is obtained from readers' previous knowledge which is known as content schemata and format schemata. The process is preceded by readers' previous knowledge activation to compose a prediction of related or unrelated meaning from the text. To boost their level of reading comprehension, readers will make an effort to discover and fit their previous knowledge with the existing topic found in the text. Finally, interactive reading theory interactively combines bottom-up and top-down reading processes. Moreover, a text cannot provide meaning by itself. It is the reader who brings information, knowledge, emotions, and experiences to the printed word. Researchers have linked individual differences with second or foreign language learning into the following classifications: cognitive factors, affective factors, and miscellaneous factors (Al-Shboul, et al., 2013).

Reading comprehension consists of three important factors, namely, the text, the readers, and the purpose of reading. All of the factors are interrelated and they come up in most social contexts which affect the reading process. In other words, readers hold a prominent position during the reading process since they are the doers who decide the interaction of other elements, such as text selection, strategy selection, and reading goals/ achievement. There are two factors of reading: external and internal factors. The internal factors are readers' ability which is being used whilst reading (the implemented strategy), cognitive skills, and affective factors, while the external factors are factors brought by the text and writer.

Reading is commonly believed as the window of the world. In the context of language learning, reading is carried out with various objectives, such as finding main ideas, finding certain information, learning something, and doing a synthesis of information in the text to determine opinions (Khaki, 2014). Since reading is a complex endeavor, many activities are involved in it such as understanding and remembering ideas, identifying information, and understanding and synthesizing information. Readers can use some strategies to have a good understanding such as rereading the text, finding clues from the context, and making conclusions. Since reading texts contain some messages made by the writer, readers have to uncover the messages in the reading texts and use the texts to create meaning. According to Fachrurrazy (2014) and Eker (2014), active thinking is activated during reading, and learners can enhance their reading comprehension skills. In addition, Muhid, et al. (2020) conducted experimental research that shows metacognitive strategies had a positive effect on learners' reading achievement. So, it showed that metacognitive strategy could improve learners' reading comprehension since it is proven by the increase in learners' reading comprehension.

The findings from several studies mentioned above support the use of metacognitive strategies in reading comprehension. When measured using TASK-Texas Achievement of Knowledge and Skills Hong-Nam, et al. (2014) state that learners who are classified as proficient in reading comprehension use more strategies than those who are classified as substandard learners. The study reveals that there is a strong correlation between reading achievement and the use of learners' metacognition awareness strategies.

The metacognitive strategies used by learners vary. Mokhtari and Sheorey (2002) adopted the Survey of Reading Strategies (SORT) and there are three subscales or categories, namely global reading strategies, problem-solving strategies, and support reading strategies. The first scale is global reading strategies. It covers the intentional and carefully planned technique for learners to monitor or manage their reading, for example by having a purpose in mind, screening text's length and organization, or using typographical supports, tables, and figures. Next, the problem-solving strategies deal with the readers' acts and ways while working nonstop with the text. These strategies are more likely restricted and focused on the arising problem that learners encounter while reading, for example by adjusting reading speed to reading material difficulty, guessing the meaning of unknown words, and rereading the text to gain a better comprehension. The last scale is the support reading strategies. It is a rudimentary instrument that is meant to help learners understand a text, for example utilizing a dictionary, taking notes, underlining, and highlighting important parts of the text.

In addition, Alhaqbani and Riazi (2012) state that problem-solving strategies tend to be used most by learners. When those three strategies were used, there was a significant relationship between the use and the level of ability of junior high school learners. This study showed that the more time learners spend, the more likely they become strategic readers. Another study conducted by Tavakoli (2014) with English language learners at Iran University reveals that learners' knowledge of metacognitive reading strategies is significantly influenced by their level of proficiency.

Effective learning strategies, especially those focused on reading, empower learners to take ownership of their learning journey, fostering autonomy, independence, and self-directed learning. Those who possess a thorough understanding of reading strategies predominantly employ support reading, prioritizing global reading, and subsequently applying problem-solving. It has been observed that learners' diverse backgrounds influence their inclination toward specific metacognitive strategies.

Within Indonesia's educational context, Nisa (2016) finds out that learners with either low or high reading skills use metacognitive strategies in reading. For example, for problem-solving strategies, learners used strategies, such as underlining, highlighting, circling, and picturing or visualizing certain information. Next, for global reading strategies, learners applied strategies, such as using prior knowledge and setting a purpose in mind. The last, to support reading strategies, learners utilized an English dictionary and took notes while reading. Furthermore, she also claimed that learners with high reading ability frequently used problem-solving strategies, followed by global reading strategies and support reading strategies. The number of the strategy frequency was relatively high. In addition, the sequence was quite different for low reading ability learners. They tended to use global reading strategies first, then it was followed by problem-solving strategies, and last support reading strategies. Those strategies were used moderately by low-reading ability learners. However, the difference in reading strategies that took place between both groups, was considered to be insignificant.

Another research conducted by Pammu, et al. (2014) investigated the metacognitive strategies used by learners with low levels of English proficiency at the English Education Department of Makassar State University. They discovered a pattern in the metacognitive techniques employed by weaker learners. They did not discover, however, that learners with high ability were using these strategies, as low reading ability was not always correlated with a low degree of English proficiency.

When reading a text, learners may feel anxious. Anxiety that occurs in the reading process is usually called reading anxiety. Muhlis (2014) stated that reading anxiety is a distinct phenomenon from foreign language anxiety in general. Saito, et al. (1999) classify the cause of anxiety into two aspects. The first aspect is the unfamiliar script and writing system. Learners who are familiar with the target language script are less likely to experience anxiety when reading. Learners face difficulties when they try to decode manuscripts because they encounter difficulties directly in the reading process (Al-Shboul, et.al., 2013). The second aspect is foreign culture. This can be said to be an indirect cause of student anxiety. Al-Shboul, et.al, (2013) stated that although learners can decode manuscripts and understand the meaning of sentences, at a certain point, they understand the entire text because of partial knowledge of the cultural material inherent in the text.

Language anxiety is an important element in language acquisition, influencing self-perceptions, behaviors, feelings, and beliefs. According to Ariani et al. (2016), anxiety and tension related to learning a foreign language can hinder English acquisition and negatively impact performance. Reducing anxiety can help with language learning, retention, and learner motivation. Furthermore, their research found that anxiety had a statistically negative correlation with learners' English achievement, indicating that low-anxious learners were more likely to get better English scores, whereas high-anxious learners tended to achieve lower English scores. Moreover, Mawaddah (2022) conducted research with EFL learners at a Junior High School in MTs Negeri 5 Jember. She stated that the learners experiencing a moderate degree of reading anxiety had a problem with a fear of making mistakes and it was the main cause of their reading anxiety. Furthermore, language anxiety exerts a widespread influence within language learning environments, necessitating its incorporation into any theoretical framework. It is widely acknowledged that language anxiety correlates closely with self-perception, underscoring the importance of integrating this factor when examining language anxiety.

In the previous research, the researchers only used metacognitive strategies without reading anxiety to reading comprehension, and on the other hand, the others only used reading anxiety without metacognitive strategies to reading comprehension, so no research used both metacognitive reading strategies and reading anxiety in a time to reading comprehension. Moreover, the aforementioned previous research took place in the lower secondary, upper secondary, and university levels. Therefore, this research aims to fill in the gap since this study does not focus only on reading strategies used by university learners but also on reading anxiety experienced by them.

This research seeks to find evidence of how learners' anxiety and reading strategies may or may not contribute to learners' reading comprehension. In short, no studies ever discussed reading strategies used and reading anxiety experienced by learners at the university level to get reading

comprehension within the Indonesian context, especially in the Islamic field. Therefore, the research questions to be answered in this study are:

1. is there any partially significant correlation between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension?
2. is there any simultaneously significant correlation between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension?
3. which among global reading, problem-solving, support reading, worry, emotionality, and task-generated interference dominantly contributes to reading comprehension?

METHOD

This study aimed to identify the predictors of reading comprehension from the kinds of reading strategies and reading anxiety of learners. It is aimed to reveal whether the factors contributed to reading comprehension. The study was analyzed through multiple regression analysis since it is a statistical procedure for examining the combined relationship of multiple independent variables with a single variable. In this current study, 3 variables namely reading strategy, reading anxiety, and reading comprehension were involved. There were 2 independent variables used. They were learners' reading strategy and learners' reading anxiety while the reading comprehension test was the dependent variable.

Population and Samples

The number of students at UIN Maulana Malik Ibrahim Malang was the target population measured in this study. The researcher used convenience sampling since the subjects in the study were chosen because they were readily available. The researcher selected some majors which are medical education study program/PSPD (30), Madrasah Ibtidaiyah teacher education/PGMI (30), management (60), science of Qur'an and interpretation/IAT (30), accounting (30), psychology (30), physics (30), chemistry (30), Arabic language education/PBA (60), biology (60), library and information science/PII (30), elementary school teacher education/PSPD (60), and pharmacy (60). Furthermore, they were considered as the learners who had studied the reading comprehension subject in their lectures and were able to participate well.

Research Instruments

The researcher utilized three specific instruments to collect data on learners' reading strategies, anxiety levels, and reading comprehension scores, focusing on their reading comprehension of text and their reading comprehension scores. The instruments used by the researchers were as follows:

1. Reading Comprehension Test

Reading for comprehension is the process of extracting and generating meaning through engagement and involvement with written language, where interaction between readers and texts occurs during the process of reading. In this case, the researcher measured learners' reading comprehension in English. The reading test was taken from the Test of English Proficiency (TEP) which was a TOEFL-like prediction test. By using this test, the researcher intended to assess learners' skills in reading comprehension generally. The reading test utilized in this current research consists of 50 test items.

2. Foreign Language Reading Anxiety Scale (FLRAS)

Saito, et al. (1999) developed the instrument that informs the learners' general anxiety when they are reading English tests. This is to explore the learners' responses regarding their anxiety in

dealing with various reading tasks their perception toward reading difficulties, and their opinions related to reading in the target language. 20 statements should be responded to by the participant. The scale covers 5 Likert scales with the interpretation; 1 for strongly agree with the statement, 2 for agree with the statement, 3 for neutral, 4 for disagree with the statement, and 5 for strongly disagree with the statement. Liu (2015) in her PhD dissertation modified the FLRAS by selecting items that suited her study. Then this version was also adapted by Tsai, et al. (2018). It showed that the FLRAS developed by Saito, et al. (1999) was usable by any researcher who wanted to conduct studies related to reading anxiety. Therefore, the current researcher also adapted the FLRAS.

3. Survey of Reading Strategy (SORS) Questionnaire

The instrument developed by Mokhtari and Sheorey (2002), lately was also used by some researchers. Safia and Ghania (2020) adapted this with Algerian ESP Students at the National Higher School for Hydraulic. In a newer year, Oranpattanachai (2023) also adapted this instrument to know the relationship between the reading strategy, reading self-efficacy, and reading comprehension of Thai EFL students. They modified the instrument to suit their needs in their studies. This current research also adapted this instrument to find out learners' reading strategies. It is to survey non-native English speaker learners although both instruments are designed to find out learners' reading strategies. The higher the number that the learners select, the more frequently the learners' action reflects the strategies.

Data Collection

To obtain the needed data, the researcher tested the learners with a reading comprehension test taken from a Test of English Proficiency (TEP) consisting of listening comprehension, structure and written expression, and reading comprehension. Yet, the researcher only took scores from the reading comprehension test. After that, the researcher distributed FLRAS questionnaires and SORS questionnaires to the learners as the subjects of this study. There were 540 questionnaires to be distributed to learners from 13 majors. The researcher as the investigator provided about 15 minutes to complete the questionnaire with 50 items. At last, the results of the reading comprehension test and questionnaires were analysed.

RESULTS AND DISCUSSION

Following the collection of data from the reading comprehension test and questionnaires, the researcher employed the following procedures in the data analysis process:

Descriptive Analysis

The SPSS v23 software was used to analyze the research. The purpose of the descriptive analysis was to provide a general overview of the respondents' answers to the reading comprehension test, reading strategies, and reading anxiety.

Descriptive Statistic of Reading Strategies

The information regarding the summary of the raw data collected from the questionnaire is presented using descriptive statistics. These are the findings from the statistical analysis of the research variables: reading comprehension, global reading, problem-solving, support reading, worry, emotionality, and task-generated interference.

Description of Global Reading

The results of the description of the global reading can be seen in Figure 1.

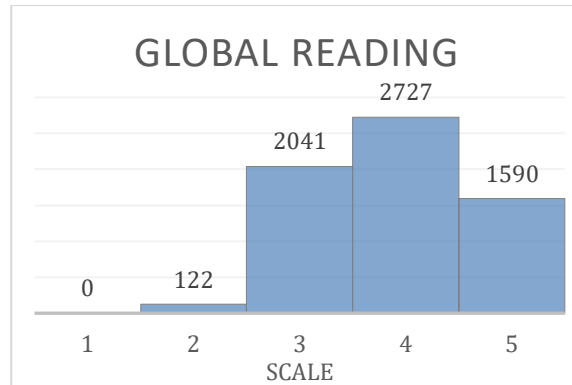


Figure 1 Description of Global Reading

This shows that the respondents gave a positive response to the global reading variable items.

Description of Problem Solving

The results of the description of the problem-solving can be seen in Figure 2.

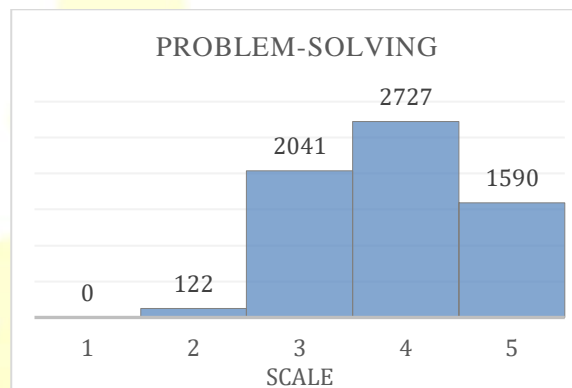


Figure 2 Description of Problem-Solving

This shows that the respondents gave a positive response to the problem-solving variable items.

Description of Support Reading

The results of the description of the support reading can be seen in Figure 3.

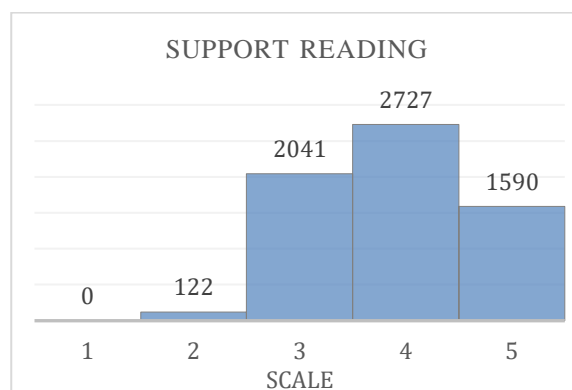


Figure 3 Description of Support Reading

This shows that the respondents gave a positive response to the support reading variable items.

Descriptive Statistic of Reading Anxiety

Following are the results of the statistical description of the research variables, namely worry, emotionality, and task-generated interference.

Description of Worry

The results of the description of the worry can be seen in Figure 4.

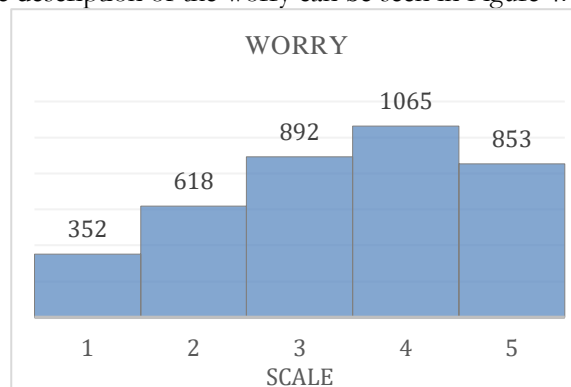


Figure 4 Description of Worry

This shows that the respondents gave a positive response to the worry variable items.

Description of Emotionality

The results of the description of the emotionality can be seen in Figure 5.

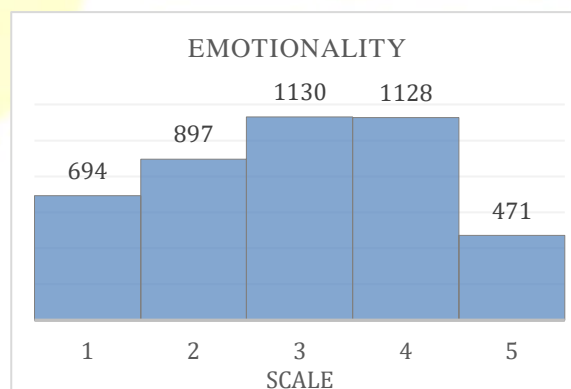


Figure 5 Description of Emotionality

This shows that the respondents gave a positive response to the emotionality variable items.

Description of Task-Generated Interference

The results of the description of the task-generated interference can be seen in Figure 6.

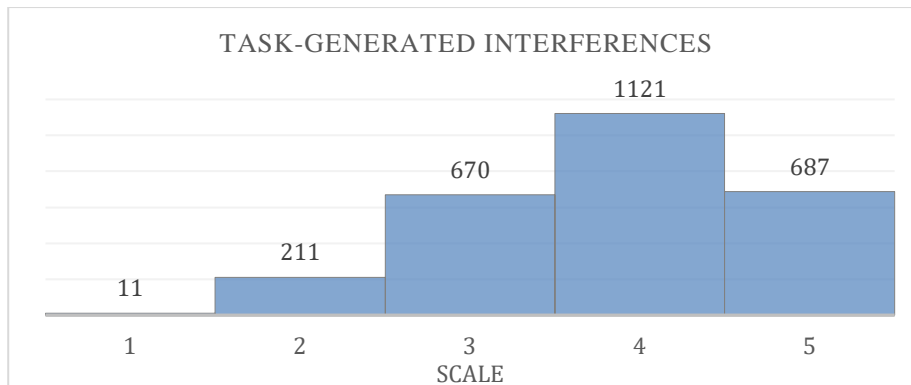


Figure 6 Description of Task-Generated Interference

This shows that the respondents gave a positive response to the task-generated interference variable items.

Descriptive Statistic of Reading Comprehension

Following is the result of the statistical description of the research variables, namely reading comprehension. Table 1 presents the result of descriptive statistics briefly.

Scores	F	%	Mean	SD	Min	Max
61-70	310	57.4%	68	5	58	77

Table 1 The results of the Description of Reading Comprehension Test

The results of the description of the reading comprehension test show that the majority of learners' grades are grades 61-70 with 310 learners which were 57.4% of the total numbers. It was stated that the mean score was 68, the minimum score was 58, and the maximum score was 77 with a standard deviation was 5.

Classical Assumption Test

Ainiyah, et al. (2016) stated that a statistical test called the classical assumption test is used to ascertain the interconnection of variables. It covers normality, homoscedasticity, and multicollinearity. The following displays the outcomes of the classic assumption test of the linear regression model between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension.

Analyzing the Assumption of Normality

According to Kim and Park (2019), the normality assumption states that the gathered data must follow a normal distribution for the parametric assumption to be true. The normality test is largely supported by statistical programs; however, the test's power is not included in the conclusions; only P values are.

Normality Test

The following displays the outcomes of the normality test for the linear regression model between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension using the Normal P-P plot. It is presented in Figure 7.

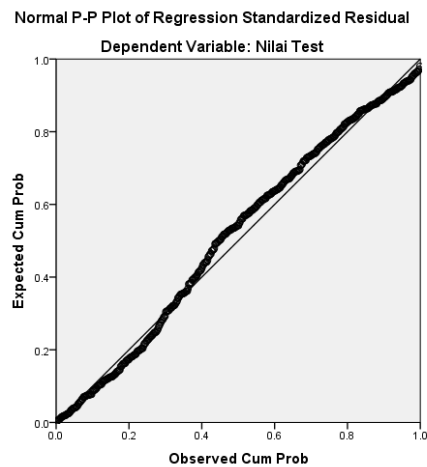


Figure 7 Result of Normality Test

Residual normality test results using the Normal P-P plot against the linear regression model between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension showed that plot points coincide with diagonal lines so that the residuals follow the normal distribution and assumptions normality was fulfilled.

Analyzing the Assumption of Homoscedasticity

According to Lani (2013), central to linear regression models is the assumption of homoscedasticity. If the error term remains consistent across all values of the independent variables, it is referred to as homoscedasticity. If the magnitude of the error term fluctuates across the values of an independent variable, heteroscedasticity becomes apparent. The following are the outcomes of the heteroscedasticity test for the linear regression model between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension using Scatter plot graphs. It is presented in Figure 8.

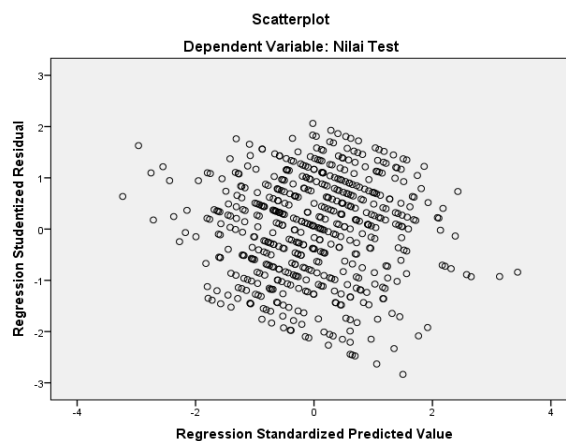


Figure 8 Results of the Heteroscedasticity Test

Heteroscedasticity test results on the linear regression model between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension using Scatter plot graphs were known that plot points were scattered randomly and did not form certain patterns so that the assumptions of heteroscedasticity were fulfilled.

Analyzing the Assumption of Multicollinearity

Multicollinearity is a significant relationship between one independent variable to some or all independent variables.

Multicollinearity Test

Following are the outcomes of the multicollinearity test for the linear regression model between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension using the VIF test. It is presented in Table 2.

Model	Collinearity Statistics	
	Tolerance	VIF
Global Reading	.986	1.014
Problem-Solving	.970	1.031
Support Reading	.970	1.031
Worry	.982	1.018
Emotionality	.979	1.021
Task Generated Interference	.995	1.005

Table 2 Results of the Multicollinearity Test

The results of multicollinearity tests on the linear regression model between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension using the VIF test showed that the VIF value of each independent variable was less than 10 so that no multicollinearity problems were found.

Multiple Linear Regression

It is a statistical method for forecasting the outcome of a dependent variable by utilizing many independent variables. The aim is to depict the linear correlation between the independent and dependent variables. The results of multiple linear regression between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension are presented in Table 3.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.073	6.394		.324	.746
Global Reading	.364	.080	.181	4.549	.000
Problem-Solving	.447	.101	.177	4.415	.000
Support Reading	.477	.102	.187	4.667	.000
Worry	.189	.070	.108	2.721	.007
Emotionality	.176	.068	.104	2.596	.010
Task Generated Interference	.364	.123	.117	2.955	.003

Table 3 Result of Multiple Linear Regression

The results of multiple linear regression equations between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference variables to reading comprehension are presented as follows:

$$y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5 + b_6 x_6 + e$$

$$y = 2.073 + 0.364 x_1 + 0.447 x_2 + 0.447 x_3 + 0.189 x_4 + 0.176 x_5 + 0.364 x_6 + e$$

From this equation, it can be described as follows:

- a. The constant value (a) of 2.073 shows that without the contribution of global reading, problem-solving, support reading, worry, emotionality, and task-generated interference, the reading comprehension value is 2.073.
- b. The global reading coefficient value of 0.364 indicates that each increase in global reading value of 1 unit influences the reading comprehension value of 0.364 or the better the global reading, the better the reading comprehension.
- c. The problem-solving coefficient value of 0.447 indicates that each increase in the value of problem-solving by 1 unit influences the value of reading comprehension by 0.447 or the better the problem-solving, the better the reading comprehension.
- d. The support reading coefficient value of 0.477 indicates that each increase in the value of reading support by 1 unit influences the reading comprehension value of 0.477 or the better the reading support, the better the reading comprehension.
- e. The worry coefficient value of 0.189 indicates that each increase in worry value of 1 unit influences the reading comprehension value of 0.189 or the better the worry, the better the reading comprehension.
- f. The emotionality coefficient value of 0.176 indicates that each increase in the emotionality value of 1 unit influences the value of reading comprehension of 0.176 or the better the emotionality, the better the reading comprehension.
- g. The task-generated interference coefficient value of 0.364 indicates that each increase in the value of task-generated interference by 1 unit influences the value of reading comprehension by 0.364 or the better the task-generated interference, the better the reading comprehension.
- h. From testing the dominant factor can be seen in the standardized coefficients beta column, where the highest value obtained at 0.187 indicates that the support reading variable is the dominant factor from reading strategies influencing the increase in reading comprehension.
- i. From testing the dominant factor can be seen in the standardized coefficients beta column, where the highest value obtained at 0.117 indicates that the task-generated interference variable is the dominant factor from reading anxiety influencing the increase in reading comprehension.

Testing Contribution

Its purpose is to evaluate the simultaneous or partial contributions of independent variables to dependent variables. Presented below are the findings from the simultaneous tests (F test), coefficient of determination (R^2), and partial tests (t-test) used to test the hypotheses related to global reading, problem-solving, support reading, worry, emotionality, and task-generated interference variables to reading comprehension.

Simultaneous Test (F-Test)

The purpose of the F-test was to determine if all independent variables simultaneously influenced the dependent variable. The researcher used the SPSS v23 program to get the result. Following are the results of testing the contribution of global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension simultaneously using the F test. It is presented in Table 4.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2245.639	6	374.273	18.195	.000 ^b
Residual	10964.065	533	20.570		
Total	13209.704	539			

Table 4 Result of Simultaneous Test (F-Test)

The results of simultaneous testing with the F test showed that the calculated F value (18.195) was more than the F table (2.116) or the significance value (.000) less than alpha (.050) showing that there was a significant contribution between global reading, problem-solving, support reading, worry, emotionality and task-generated interference to reading comprehension simultaneously.

Adjusted R²

Adjusted R² was designed to see how far the proportion of variance of variable that explained all independent variables. It is considered the degree of freedom.

Coefficient of Determination (R²)

Presented below are the outcomes of the coefficient of determination between the global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension using R². It is presented in Table 5.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.412 ^a	.170	.161	4.535

Table 5 Result of Coefficient of Determination (R²)

Table 5 showed that the coefficient of determination results stated that R Square value of .170 means that the magnitude of the effect on the reading comprehension variable caused by global reading, problem-solving, support reading, worry, emotionality, and task-generated interference variables is 17.0%, while the magnitude of the effect to the variable reading comprehension test caused by other factors is 83.0%.

Partial Test (T-test)

The purpose of the T-test was to check the partial influence of independent variables on dependent variables. Presented below are the outcomes of a partial t-test to determine the contributions of the variables namely global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to reading comprehension. It is presented in Table 6.

Model	T	Sig.
(Constant)	.324	.746
Global Reading	4.549	.000
Problem-Solving	4.415	.000
Support Reading	4.667	.000
Worry	2.721	.007
Emotionality	2.596	.010
Task Generated Interference	2.955	.003

Table 6 Result of Partial Test (T-Test)

Table 6 can be described as follows:

- A partial test comparing the global reading variable to the reading comprehension variable revealed that the global reading variable significantly contributed to the reading comprehension variable, with the significance value (0.000) being less than the alpha (0.050) or the t count (4.549) being more than the t table (1.964).
- A partial test comparing the problem-solving variable to the reading comprehension variable revealed that the problem-solving variable significantly contributed to the reading comprehension variable, with the significance value (0.000) being less than the alpha (0.050) or the t count (4.415) being more than the t table (1.964).
- A partial test comparing the support reading variable to the reading comprehension variable revealed that the support reading variable significantly contributed to the reading

- comprehension variable, with the significance value (0.000) being less than the alpha (0.050) or the t count (4.667) being more than the t table (1.964).
- d. A partial test comparing the worry variable to the reading comprehension variable revealed that the worry variable significantly contributed to the reading comprehension variable, with the significance value (0.007) being less than the alpha (0.050) or the t count (2.721) being more than the t table (1.964).
 - e. A partial test comparing the emotionality variable to the reading comprehension variable revealed that the emotionality variable significantly contributed to the reading comprehension variable, with the significance value (0.010) being less than the alpha (0.050) or the t count (2.596) being more than the t table (1.964).
 - f. A partial test comparing the task-generated interference variable to the reading comprehension variable revealed that the task-generated interference variable significantly contributed to the reading comprehension variable, with the significance value (0.003) being less than the alpha (0.050) or the t count (2.955) being more than the t table (1.964).

DISCUSSION

The objective of this study was to reveal whether any significant contribution between the independent variables: global reading, problem-solving, support reading, worry, emotionality, and task-generated interference to the dependent variable: reading comprehension. The significant contributions investigated were in the form of simultaneously significant contributions and the form of partially significant contributions. Besides investigating that, the study also had to find out the variable that had a dominant significant contribution to reading comprehension. To obtain the results, the researcher employed the statistics analysis of multiple regression analysis with the SPSS v23 program.

Based on the result of partial hypothesis testing by using the T-test, it showed that global reading, problem-solving, support reading, worry, emotionality, and task-generated interference partially had significant contributions to reading comprehension. It could be shown through each of the results of the t count and the significance value. If it was seen from the t count, the global reading was 4.549, problem-solving was 4.415, support reading was 4.667, worry was 2.721, emotionality was 2.596, and task generated interference was 2.955, in which all of the numbers were more than t table (1.964). In another way, if it was seen from the significance value, the global reading was .000, problem-solving was .000, support reading was .000, worry was .007, emotionality was .010, task generated interference was .003, in which all of the numbers were less than alpha (.050). So, there is a partially significant contribution between all of the independent variables and the dependent variable. Finally, this answered the research question 1.

Besides, the results of simultaneous testing with the F test showed that the calculated F value was 18.195 which was more than the F table, 2.116. the result could also be seen from the significance value which is .000 and it was less than alpha, .05. it means that there was a simultaneously significant contribution between global reading, problem-solving, support reading, worry, emotionality, and task-generated interference on reading comprehension simultaneously. Finally, this answered the research question 2.

Next, the result of testing showed that if it was seen in the Standardized Coefficients Beta column, task-generated interference had the highest value (.117) of the 3 variables in reading anxiety so it was the dominant variable from reading anxiety while support reading had the highest value (.187) so that it was the dominant variable from reading strategies and also of all of the six variables influencing the increase in reading comprehension. It means that support reading was that equation model that fits reading comprehension. Therefore, this answered the research question 3. Support reading strategies are rudimentary instruments that are meant to help learners understand a text, for example utilizing a dictionary, taking notes, underlining, and highlighting important parts of the text. Learners who are

sufficiently aware of the reading strategies most often use support reading strategies, followed by global reading strategies, and then problem-solving strategies. It was stated that learners' different backgrounds have different tendencies from the metacognitive strategies used.

Reading involves both internal and external factors. Internal factors include readers' abilities, cognitive skills, and affective factors, while external factors involve the text and writer. To enhance understanding, readers can use strategies like rereading, context clues, and making conclusions. Learners either with low or high reading skills, use metacognitive strategies in reading (Nisa, 2016). Hong-Nam, et al. (2014) stated that learners who are classified as proficient in reading comprehension used more strategies than those who are classified as substandard learners. Lien (2016) added that it also deals with confident learners in which they use more strategies, while less confident ones apply fewer strategies while learning. In summary, anxiety is the most potent predictor of learners' success in learning a second or foreign language (Liu and Huang cited in Al-Shboul, et. al., 2013). Sanford (2015) states that reading comprehension comprises working memory, vocabulary, prior knowledge, word recognition, and reading strategies. Furthermore, Nergis (2013) cited in Gilakjani and Sabouri (2016) stated that factors influencing reading comprehension include prior knowledge, reading strategies, vocabulary knowledge, syntactic consciousness, metacognitive information, and metacognitive recognition.

Contribution of Reading Strategies to Reading Comprehension

Following are the descriptions of the contribution of the research variables, namely Global Reading, Problem Solving, and Support Reading.

Contribution of Global Reading to Reading Comprehension

Global reading was used to prepare for the reading process, such as approaching the text with an objective and previewing its content. The following is the description of the research findings of the contribution of global reading seen from the greater part of them related to their answers to the questionnaire. First, the greater part of them that were 280 learners, or 51% sometimes had a purpose in reading, with a mean of 3.419. Second, the majority, 187 learners or 34.6% always previewed the text to know the content before they read, with a mean of 3.987. Third, the majority, 264 learners or 48.9%, sometimes thought that the text content aligned with their reading objectives, with a mean of 3.448. Fifth, the majority, 197 learners or 36.5% usually reviewed the text initially by observing its characteristics like organization and length, with a mean of 4.037. Sixth, the majority, 192 learners or 35.6%, sometimes selected what to scrutinize and what to disregard during reading, with a mean of 3.881. Seventh, the majority, 274 learners or 50.7%, sometimes utilized visual aids such as pictures, figures, and tables in the text to enhance comprehension, with a mean of 3.426. Eighth, the majority, 194 learners or 35.9%, sometimes employed contextual hints to improve their comprehension of the text, with a mean of 3.880. Ninth, the majority, 283 learners or 52.4% usually utilized formatting elements such as bolding and italics to highlight essential details, with a mean of 4.394. Tenth, the majority, 268 learners or 49.6%, sometimes verified their comprehension when encountering new information, with a mean of 3.430. Eleventh, the majority, 184 learners or 34.1%, sometimes attempted to infer the content of the text while reading, with a mean of 3.926. Twelfth, the majority, 273 learners or 50.6%, usually validated whether their assumptions about the text were accurate or not, with a mean of 4.417. Thus, the greater part of them sometimes, usually, and always did those strategies. This shows that the respondents gave a positive response to the global reading variable items. The result referred to some previous studies ever conducted. Nisa (2016) revealed that with global reading strategies, learners apply strategies, such as using prior knowledge and setting a purpose in mind. The study found that Indonesian language learners often underestimate and feel dissatisfied with their English language skills due to cultural influences and academic pressure. Asian EFL learners exhibiting superior academic achievements might experience reduced reading anxiety and employ a greater variety of reading strategies. The study concluded that the proficiency and contentment of EFL

learners with their reading skills impact both overall language anxiety and specific reading-related anxiety.

Contribution of Problem Solving to Reading Comprehension

Problem-solving is utilized when challenges emerge regarding a more profound grasp of textual content, including verifying comprehension or revisiting the material. The following is the description of the research findings of the contribution of problem-solving seen from the greater part of them related to their answers to the questionnaire. First, the greater part of them that were 260 learners, or 48.1%, usually read meticulously to ensure comprehension, with a mean of 4.441. Second, the majority, 282 learners or 52.2%, usually endeavored to regain focus after losing concentration, with a mean of 4.433. Third, the majority, 179 learners or 33.1%, usually modulated their reading speed based on the material, with a mean of 3.944. Fourth, the majority, 272 learners or 50.4%, always heightened their focus on the text in challenging passages" or "increased their concentration when encountering difficult sections., with a mean of 4.489. Fifth, the majority, 200 learners or 37.0%, usually took breaks intermittently to contemplate the material, with a mean of 3.993. Sixth, the majority, 288 learners or 53.3%, usually attempted to mentally imagine or envision details to aid in retention, with a mean of 3.489. Seventh, the majority, 264 learners or 48.9%, always went over the text again to enhance understanding in difficult areas, with a mean of 4.459. Eighth, the majority, 264 learners or 35.9%, sometimes inferred the meaning of unfamiliar words or phrases while reading, with a mean of 3.876. Thus, the greater part of them sometimes, usually, and always did those strategies. This shows that the respondents gave a positive response to the problem-solving variable items. The result referred to some previous studies ever conducted. Nisa (2016) revealed that with problem-solving strategies, learners use strategies, such as underlining, highlighting, circling, and picturing or visualizing certain information.

Vocabulary knowledge is crucial for second language learners as it aids in effective communication by enabling them to identify each word in a text (Alqahtani, 2015). However, it is a disadvantage if learners as readers have a very limited vocabulary. They will readily grasp unfamiliar vocabulary when reading a text, potentially leading to anxiety. Moreover, Tsai, et al. (2018) concurred that unfamiliar vocabulary, unfamiliar topics, lengthy and intricate text structures, and the apprehension of committing errors were pinpointed as the primary contributors to foreign language reading anxiety. Ahmad, et al. (2013) also additionally discovered that three principal origins of anxiety in foreign language reading, grounded on textual features, were unfamiliar topics, unfamiliar vocabulary, and unfamiliar cultural references.

Contribution of Support Reading to Reading Comprehension

Support reading was used to sustain engagement with reading, such as jotting down annotations and reading aloud. The following is the description of the research findings of the contribution of support reading seen from the greater part of them related to their answers to the questionnaire. First, the greater part of them that were 201 learners, or 37.2%, usually jotted down observations while reading to aid comprehension, with a mean of 3.902. Second, the majority, 265 learners or 49.1% usually read the text loudly to aid comprehension in challenging sections, with a mean of 3.446. Third, the majority, 282 learners or 52.2% usually highlighted or marked key information in the text to aid memory., with a mean of 4.444. Fourth, the majority, 260 learners or 48.1% always utilized supplementary sources to enhance comprehension, with a mean of 4.441. Fifth, the majority, 265 learners or 49.1% sometimes paraphrased to better understand what they read, with a mean of 3.450. Sixth, the majority, 300 learners or 55.6% usually referred back and forth within the text to identify connections between ideas, with a mean of 4.352. Seventh, the majority, 220 learners or 40.7% usually posed inquiries they wished to be addressed within the text, with a mean of 4.044. Eighth, the majority, 207 learners or 38.3% usually translated into their native language while reading, with a mean of 3.900. Ninth, the majority, 194 learners or 35.9%, usually considered information in both English and their native language while reading, with a mean of 3.937. Thus, the greater part of

them sometimes, usually, and always did those strategies. This shows that the respondents gave a positive response to the support reading variable items. The result referred to some previous studies ever conducted. Nisa (2016) found that when learners use support reading strategies, they use an English dictionary and take notes while they read. Due to the engagement between the reader and the text during the reading process, reading comprehension is achieved. As readers, learners ought to comprehend the purpose of the text.

Contribution of Reading Anxiety to Reading Comprehension

Following are the descriptions of the contribution of the research variables, namely worry, emotionality, and task-generated interference.

Contribution of Worry to Reading Comprehension

The following is the description of the research findings of the contribution of worry seen from the greater part of them related to their answers to the questionnaire. First, the greater part of them who were 197 learners, or 36.5% sometimes felt worried over the multitude of unfamiliar symbols required to comprehend English, with a mean of 2.957. Second, the majority, 138 learners or 25.6%, hardly ever got upset when they were not sure whether they understood what they were reading in English, with a mean of 2.494. Third, the majority, 182 learners or 33.7% sometimes felt intimidated whenever they saw a whole page of English in front of them, with a mean of 2.007. Fourth, the majority, 125 learners or 23.1%, occasionally did not mind reading to themselves, but they felt very uncomfortable when reading English aloud, with a mean of 2.870. Fifth, the majority, 288 learners or 26.7% occasionally and 26.7% sometimes, though English culture and ideas seemed very foreign to them, with a mean of 2.472. Sixth, the majority, 148 learners or 27.4%, sometimes felt that it bothered them to encounter words they could not pronounce while reading English, with a mean of 2.531. Seventh, the majority, 273 learners or 50.6% usually believed that mastering English reading presents the greatest challenge, with a mean of 4.380. Eighth, the majority, 196 learners or 36.3%, usually had to possess extensive familiarity with English history and culture to understand written English, with a mean of 3.889. Thus, the greater part of them sometimes, usually, and always did the kinds of worry. This shows that the respondents gave a positive response to the worry variable items. The result referred to some previous studies conducted. During reading, readers bring more than meaning itself, they also try to relate their knowledge, information, emotion, and experience that they have into a text.

Contribution of Emotionality to Reading Comprehension

The following is the description of the research findings of the contribution of emotionality seen from the greater part of them related to their answers to the questionnaire. First, the greater part of them that were 197 learners, or 34.3% usually felt nervous when reading a passage in English with an unfamiliar topic, with a mean of 3.919. Second, the majority, 138 learners or 27.4%, sometimes became nervous and bewildered when encountering unfamiliar words while reading English, with a mean of 3.457. Third, the majority, 182 learners or 49.1% usually enjoyed reading English, with a mean of 4.428. Fourth, the majority, 125 learners or 28.3%, occasionally thought reading English was not so difficult, with a mean of 2.950. Fifth, the majority, 288 learners or 26.1%, sometimes felt delighted to focus on learning to speak English instead of having to tackle reading as well, with a mean of 2.435. Sixth, the majority, 148 learners or 27.4%, sometimes felt that it bothered them to encounter words they could not pronounce while reading English, with a mean of 3.485. Seventh, the majority, 273 learners or 24.4%, sometimes were content with the current proficiency level attained in English reading, with a mean of 3.009. Thus, the greater part of them sometimes, usually, and always felt these kinds of emotions. This shows that the respondents gave a positive response to the emotionality variable items. Finally, it should be emphasized that the affective dimension of language acquisition is crucial in the process of language learning. Therefore, Enhanced comprehension of the correlation between anxiety and performance proves advantageous for foreign language acquisition. Sanford

(2015) further found that reading comprehension includes working memory, vocabulary, prior knowledge, and word recognition. Faced with emotions, learners feel high anxiety when they do not understand the meaning of the words they read. Anxiety can detrimentally affect the language acquisition process in multiple ways.

Contribution of Task Generated Interference to Reading Comprehension

The following is the description of the research finding of the contribution of task-generated interference seen from the greater part of them related to their answers to the questionnaire. First, the greater part of them that were 274 learners, or 50.7% sometimes got so confused when reading English that they could not remember what they were reading, with a mean of 3.422. Second, the majority, 181 learners, or 33.5% occasionally felt that it was hard to remember what they were reading about by the time they got past the funny letters and symbols in English, with a mean of 2.937. Third, the majority, 287 learners or 53.1% usually grasped the vocabulary but struggled to fully comprehend the author's message while reading English, with a mean of 4.391. Fourth, the majority, 288 learners or 53.3% always got upset whenever they encountered unknown grammar when reading English, with a mean of 4.513. Fifth, the majority, 185 learners or 34.3%, sometimes ended up translating word by word when they were reading English, with a mean of 3.926. Thus, the greater part of them sometimes, usually, and always felt the kinds of task-generated interference. Anxiety, commonly experienced by language learners, impedes language acquisition and stands as one of the most extensively studied factors across psychology and language learning domains. This shows that respondents gave positive responses to the items in the Task Generated Interference variable. In addition, Lien (2016) shows that confident learners have low levels of anxiety and believe that they will do their assignments well, whereas learners who are less confident and more anxious tend to think that they will not be able to do their assignments well.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study was conducted with 540 learners of UIN Maulana Malik Ibrahim Malang as the subjects of this research. Based on the research problem and the research findings, it can be concluded that reading strategies including global reading, problem-solving and support reading, and reading anxiety including worry, emotionality, and task-generated interference had a significant contribution to reading comprehension. The significant contributions were in the form of both simultaneously significant contributions and partially significant contributions. Besides, the result showed that of all independent variables of reading anxiety, task-generated interference had the highest value which was the dominant variable in reading anxiety. Next, it was also shown that the dominant variable from reading strategies was support reading. Moreover, if it is seen from the values of contribution level of global reading, problem-solving, support reading, worry, emotionality, and task-generated, it is concluded that support reading had the highest value of all and it became the dominant variable to reading comprehension.

Recommendations

Regarding the findings and limitations of this study, there are several suggestions for future researchers

In light of the study's findings and limitations, numerous recommendations are proposed for future researchers and English teachers or lecturers:

First, to determine the actual use of reading strategies and reading anxiety in understanding English texts for university learners, the next researcher should either add instruments like observation or interviews, or improve data collection or analysis techniques with variables that differentiate gender, text difficulty level, motivation, and self-efficacy. It is evident that solutions for improving reading comprehension and reducing reading anxiety in learners still do not fully capture the process of learning to read texts. Numerous elements can influence a learner's proficiency when reading English

texts, including reading strategies and reading anxiety. Thus, additional study is still required to fully understand this affective component in reading English literature. To give more representative data for future research, data from many private universities and other state universities in Indonesia must be obtained.

Second, within the classroom, learners experience anxiety during reading activities when their teacher/lecturer corrects their reading comprehension. Learners will not take it personally if the teacher/lecturer appropriately fixes their errors. Therefore, this activity requires both favorable and critical criticism. As a result, learners may believe that the teacher/lecturer is assisting them, which is an indication of a conducive learning environment. Additionally, when a teacher/lecturer handles an uninteresting text, learners become nervous. Teachers/lecturers should consider this, especially when dealing with texts that are appropriate for their students. It is preferable if the teacher/lecturer promotes autonomy for learners in the reading classroom. This can be achieved by assigning a lot of reading and building a class library with the learners' books that they have selected. There are limitations on the difficulty of the questions about the suggested material as well. According to the fundamentals of learning assessment, test questions should be well-written and cover higher-order thinking abilities to increase comprehension. The teacher/lecturer needs to keep an eye on this. For learners to get ready and carry out further studies, they must also be informed. Consideration must be given to learners' English comprehension while creating instructional media. If learners are unable to understand English, there is no use for the teacher/lecturer to utilize it directly throughout the lesson. Treating learners as bilingual learners can help to ease their anxiety and make knowledge of English easier.

REFERENCES

- Abbasian, G. R., & Shad, B. H. (2016). The Relationship Between Metacognitive Strategy Use, Good Language Learner, and Iranian EFL Learner's Willingness to Communicate. *LiBRI. Linguistic and Literary Broad Research and Innovation*, 4(1-2): 27-45. <http://www.brain.edusoft.ro/index.php/libri/article/viewFile/534/584>.
- Ahmad, I., Sheikh, Al-Shboul, Murad, M., Nordin, Mohamad, S., Rahman., Zainurin, A. B., Mohd., & Madarsha, K. B. (2013). *The Potential Sources of Foreign Language Reading Anxiety in a Jordanian EFL Context: A Theoretical Framework*. Canadian Center of Science and Education: Malaysia.
- Ainiyah, N., Deliar, A., & Virtriana, R. (2016). The Classical Assumption Test to Driving Factors of Land Cover Change in The Development Region of Northern Part of West Java. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XLI-B6. <https://isprs-archives.copernicus.org/articles/XLI-B6/205/2016/isprs-archives-XLI-B6-205-2016.pdf>.
- Alhaqbani, A. & Riazi, M. (2012). Metacognitive Awareness of Reading Strategy Use in Arabic as a Second Language. *Reading in a Foreign Language*, 24(2), 231-255.
- Alqahtani, M. (2015). The Importance of Vocabulary in Language Learning and How to be Taught. *International Journal of Teaching and Education*, 3(3): 21-34.
- Al-Shboul, M. M., Ahmad, I. S., Nordin, M.S, & Rahman, Z. A. (2013). Foreign Language Reading Anxiety in a Jordanian EFL Context: A Qualitative Study. *Canadian Centre of Science and Education, English Language Teaching*, 6 (6): 38-56.
- Ariani, S., Sunggingwati, D., Iswari, & W.P. (2017). Foreign Language Anxiety and English Achievement of Eighth Grade Students of Mts Sulaiman Yasin Samarinda in the 2011/2012 Academic Year. *CaLLs: Journal of Culture, Arts, Literature, and Linguistics*, 2 (2). <https://e-journals.unmul.ac.id/index.php/CALLS/article/view/694/634>.
- Dewaele, J. M. (2013). *Emotions in multiple languages* (2nd ed.). Basingstoke: Palgrave Macmillan.
- Eker, C. (2014). The Effect of Teaching Practice Conducted by Using Metacognition Strategies on Students' Reading Comprehension Skills. *International Online Journal of Educational Sciences*, 6 (2): 269-280. <http://dx.doi.org/10.15345/iojes.2014.02.002>.

- Fachrurrazy. (2014). *Teaching English as foreign language for teacher in Indonesia*. Malang: State University of Malang Press.
- Gilakjani, A. P., & Sabouri, N. B. (2016). A Study of Factors Affecting EFL Learners' Reading Comprehension Skill and The Strategies for Improvement. *International Journal of English Linguistics*, 6(5): 180-187. <http://dx.doi.org/10.5539/ijel.v6n5p180>
- Hong-Nam, K. (2014). ELL High School Students' Metacognitive Awareness of Reading Strategy Use and Reading Proficiency, *TESL-EJ*, 18(1).
- Hong-Nam, K., Leavell, A. G., & Maher, S. (2014). The Relationships Among Reported Strategy Use, Metacognitive Awareness, and Reading Achievement of High School Students. *Reading Psychology*, 35(8): 762-790. <https://doi.org/10.1080/02702711.2013.807900>
- Hong-Nam, K., Leavell, A.G., & Maher, S. (2014). The Relationships among Reported Strategy Use, Metacognitive Awareness, and Reading Achievement of High School Students, *Reading Psychology*, 35(8): 762-790. <https://www.tandfonline.com/doi/abs/10.1080/02702711.2013.807900>
- Kane, S., Miriam L., & Cecilia, M. D. (2014). Reflections on the Role of Metacognition in Student Reading and Learning at Higher Education Level. *Africa Education Review*, 11(4): 512-525. <https://doi.org/10.1080/18146627.2014.935001>
- Kendeou, P., McMaster, K. L., & Christ, T. J. (2016). Reading Comprehension: Core Components and Processes. *Policy Insights from the Behavioral and Brain Sciences*, 3(1): 62-69. <https://doi.org/10.1177/2372732215624707>
- Khaki, N. (2014). Improving reading comprehension in a foreign language: Strategic Reader. *Journal of Education*, 14(2).
- Kim, T.K. & Park, J.H. (2019). More about the basic assumptions of t-test: normality and sample size. *Korean Journal of Anesthesiology*, 72 (4): 331-335. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6676026/pdf/kja-d-18-00292.pdf>.
- Krisdiana, B. P., Irawati, E., & Kadarisman, A. E. (2018). The Effectiveness of Role-Play Integrated with Word Cards on Students' Speaking Skill for Communication. *Jurnal Pendidikan Humaniora*, 6(2): 78-84.
- Lani, J. 2013 *Statistics Solutions*. <https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/homoscedasticity/>.
- Lien, H. Y. (2016). Effects of EFL individual learner variables on foreign language reading anxiety and metacognitive reading strategy use. *Psychological reports*, 119(1): 124-135.
- Lu, Z. & Liu, M. (2015). An investigation of Chinese University EFL Learner's Foreign Language Reading Anxiety, Reading Strategy Use and Reading Comprehension Performance. *Studies in Second Language Learning and Teaching*, 5(1), 65-85.
- Masduqi, H. (2014). EFL Reading in Indonesian Universities: Perspectives and Challenges in Cultural Contexts. *Journal of Teaching and Education*, 03 (03): 385-397.
- Mawaddah, P.R. (2022). *Foreign Language Reading Anxiety Level and Its Potential Factors among EFL Junior High School in MTs Negeri 5 Jember 2021/2022 Academic Year*. http://digilib.uinkhas.ac.id/9431/1/FIX_REVISI_SKRIPSI_AYA_beda123.pdf
- Mokhtari, K. & Sheorey, R. (2002). Measuring ESL Students' Awareness of Reading Strategies. *Journal of Developmental Education*, 25(3): 2-10.
- Muhid,A., Amalia, E. R., Hilaliyah, H., Budiana, N., & Wajdi, M. B. N. (2020). The Effect of Metacognitive Strategies Implementation on Students' Reading Comprehension Achievement. *International Journal of Instruction*, 13(2), 847-862. 2. <https://doi.org/10.29333/iji.2020.13257a>
- Muhlis, A. (2014). *Foreign Language Reading Anxiety among Indonesian EFL Senior High School Students*. Unpublished. Indonesia University.
- Nergis, A. (2013). Exploring the Factors That Affect Reading Comprehension of EAP Learners. *Journal of English for Academic Purposes*, 12(1): 1-9. <https://www.sciencedirect.com/science/article/pii/S1475158512000550>.

- Nisa, T. (2016). *Metacognitive Strategies In Reading Comprehension: The Case Of Indonesian University EFL Students With Different Reading Ability*. Unpublished Thesis. Malang: Graduate Program of State University of Malang.
- Oranpattanachai, P. (2023). Relationship between the Reading Strategy, Reading Self-efficacy, and Reading Comprehension of Thai EFL Students. *LEARN Journal: Language Education and Acquisition Research Network*, 16(1), 194-220.
- Pammu, A. Zaini, A., Tengku, N. R., & Tengku, M. M. (2014). Metacognitive Reading Strategies of Less Proficient Tertiary Learners: A Case Study of EFL Learners at a Public University in Makassar, Indonesia. *Procedia- Social and Behavior Science*, 18: 357–364. <https://doi.org/10.1016/j.sbspro.2014.02.049>.
- Permatasari, A. (2015). *Reading Anxiety, Self-Efficacy, Reading Strategy Use, and Reading Comprehension of Indonesian EFL College Students*. Unpublished Thesis. Graduate Program, State University of Malang.
- Rad, N. F. & Rahanama, M. (2015). Multiple Intelligence: General Proficiency, Speaking, and Reading Comprehension Performance of EFL Learners. *Journal of Social Studies*, 1(2): 11-14.
- Riswanto, R. & Lismayanti. (2014). The Effect of Using KWL (Know, Want, Learned) Strategy on EFL Students' Reading Comprehension Achievement. *International Journal of Humanities and Social Science*, 4.
- Safia, B. & Ghania, O. (2020). An Examination of Reading Strategies Awareness among Algerian ESP Students at the National Higher School for Hydraulics. *Journal of Language and Linguistic Studies*, 16(4), 1784-1802.
- Saito, Y., Horwitz, E. K., & Garza, T. J. (1999). Foreign Language Reading Anxiety. *The Modern Language Journal*, 83(2), 202–218.
- Sanford, K. L. (2015). Factors That Affect the Reading Comprehension of Secondary Students with Disabilities. *Retrospective Theses and Dissertations*. Paper 125. <http://repository.usfca.edu/cgi/viewcontent.cgi?article=1125&context=diss>.
- Sulistyo, G. H. (2017). Detecting Anomalies in Assessment Devices for Cross-Cultural Use: Fairness Concerns. *KnE Social Sciences*, 1(3): 88-102. <https://doi.org/10.18502/kss.v1i3.728>
- Sulistyo, G.H. (2015). *EFL Learning Assessment at School: An Introduction to Its Basic Concept and Principles*. Malang: CV.Bintang Sejahtera.
- Sutiyatno, S. & Sukarno, S. (2019). A Survey Study: The Correlation between Metacognitive Strategies and Reading Achievement. *Theory and Practice in Language Studies*, 9(4): 438-444.
- Tavakoli, H. (2014). The Effectiveness of Metacognitive Strategy Awareness in Reading Comprehension: The Case of Iranian University EFL Students. *The Reading Matrix*, 14(2). <https://encr.pw/vujAS>
- Tsai, Y.R., Lee, & Chun-Yen. (2018). An Exploration into Factors Associated with Reading Anxiety among Taiwanese EFL Learners. *TEFLIN Journal*, 29(1): 129-148.
- Veloo, A., Rani, M. A., & Hariharan, K. (2015). The Role of Gender in The Use of Metacognitive Awareness Reading Strategies Among Biology Students. *Asian Social Science*, 11(1): 67. <http://dx.doi.org/10.5539/ass.v11n1p67>
- Wang, Z. (2014). Developing Accuracy and Fluency in Spoken English of Chinese EFL Learners. *English Language Teaching*, 7(2): 110-118. <http://dx.doi.org/10.5539/elt.v7n2p110>.