# THE CORRELATION BETWEEN STUDENTS' CRITICAL THINKING SKILLS AND THEIR READING COMPREHENSION AT UNDERGARDUATE STUDY PROGRAM ENGLISH DEPARTMENT FACULTY OF LANGUAGES AND LITERATURE UNIVERSITAS NEGERI MAKASSAR

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#### **ABSTRACT**

The study's goal was to determine the level of students' critical thinking skills, the level of students' reading comprehension, the classification of the students' critical thinking skills toward the students' reading comprehension, and whether there was a significant correlation between students' critical thinking skills and their reading comprehension. The study used quantitative methods, specifically a correlational study. The participants were from the English Education Study Program of fifth semester students at Universitas Negeri Makassar. The study's findings revealed that critical thinking skills were significantly correlated with reading comprehension using Pearson Product Moment analysis. This study clearly revealed that most students had a high proclivity for critical thinking while reading English texts, which included interpretation, analysis, evaluation, inference, explanation, and self-regulation. Thus, the results show that Students who think critically are more creative and critical in their understanding of ideas.

**Keywords**: critical thinking skill, reading comprehension, and correlational study

## **INTRODUCTION**

Humans communicate with one another through language activity, which is a social activity. Language serves as a means of social communication in society and cannot be separated from the community of speakers. Listening, speaking, reading, and writing are the four language skills required of students learning English as a foreign language. Speaking and writing abilities are productive, whereas listening and reading abilities are receptive.

According to Pradani (2021) reading is also beneficial for understanding all of the data contained in the reading text that is intended that provide insight (intellectual development) for the reader's upcoming years, stimulate educationally, reduce a stress, enhance vocabulary, and expand one's thinking. Reading can also help you understand the multiple types of technological and scientific advancements currently being developed. Reading can make scientific and technological advances understood and recognized before they are applied.

Reading comprehension is a basic ability that every education system in Indonesia must provide at every level of education. The progress of a nation cannot be differentiated from how its generation grows literacy. Reading can generate and form a person's personality, as well as awaken a nation's civilization.

One of the literacy issues in Indonesia is a lack of reading skills in society. Tohir (2019) claims that the 2012 Program for International Student Assessment (PISA) revealed that Indonesian students' reading ability is still insufficient, the standings 74th. Indonesia achieved a score of 377, while China received the highest score of 555. This means that Indonesia still has a problem in that it needs to increase the quality of its human resources on the one hand. On the other hand, it has never been able to increase the quality of its education in a competitive manner. According to Dubeck and Gove (2015), Indonesian students had the lowest reading achievement, with only 26.3 percent of reading comprehension. The study's findings are presented in a way that emphasizes the importance of developing the students' reading skills. A lack of vocabulary, ineffective reasoning, low reading interest, an unsupportive environment, and a desire for instant information are all factors that contribute to students' reading ability in Indonesia.

Reading the text generally provides the message or information. It is their responsibility to fully understand the message they learned. The ability to extract meaning from the text is referred to as reading comprehension. According to Nurdianti et al. (2019), reading comprehension refers to the process by which people who read comprehend the knowledge affirmed in the paragraph by relating this to their existing understanding. According to Mohammadi et al. (2012) critical thinking is one element that may influence students' reading comprehension. Furthermore, OECD (2019) defines fluent reading liberates storage and concentration resources that can be delegated to a high level understanding processes. It involves either general knowledge, vocabulary, or critical thinking.

Critical thinking influences students' reading comprehension success. In school, students learn to think critically through their learning process. Critical thinking is required to avoid emptying the mind. As an outcome, students must use their reasoning skills as much as possible in order to gain knowledge and analyze a text when reading. Critical thinking is a skill that students must learn throughout a process. During the reading process, the potential to divide and assess text into appropriate units should be utilized correctly and effectively.

Critical thinking is a crucial topic in contemporary education, particularly in this digital age. The particular objective of teaching critical thinking in science is to extend students' thinking ability and therefore also prepare them for today's information-rich world. According to Moon (2007), Students who accomplish those tiers or competences should be critical thinkers if critical thinking is clearly expressed in higher education descriptors. Critical thinking is the process of examining and evaluating indications, identifying questions, and effectively applying knowledge to reach a reasonable conclusion. To solve problems critically and learn new knowledge, analysis skills, reasoning, decision-making, identifying,

integrating, and evaluating are required. Critical thinking is the best way to gain relevant and trustworthy knowledge about the world.

Critical thinking skills, according to Facione (2015), include interpretation, analysis, assessment, inference, explanation, and self-regulation abilities. Furthermore, according to Greenstein (2012), the ability to appraise data, utilize techniques to make decisions, consider ideas, perform logical investigations, gather evidence, and critique assumptions are all part of critical thinking. Critical thinking is essential to achieve educational goals and meet the needs of the twenty-first century and solve social and scientific challenges encountered in daily life. It is even seen as an intellectual need for academic success.

An educational system's primary goal is to teach students how to study and think. Critical thinking is the ability to reason logically and clearly. By thinking critically, students can easily understand problems and come up with optimal solutions. Critical thinkers are able to ask the right questions, collecting and analyzing data, sorting information more effectively and creatively, think clearly from information, and reach reliable and trustworthy conclusions about something. A lack of development effort Students' critical thinking skills is one of the teachers' learning processes weaknesses. In any learning process, the teacher should encourage students to master a wide range of subject matter rather than allowing the students to exercise their ability to think creatively. This is due to the fact that the classroom learning process concentrates on students' capacity to recall and gather information rather than requiring them to comprehend the knowledge they memorize in order to apply it in daily situations.

Students in today's technological era have a tendency to think quickly and pragmatically. If students' ability to reason is instilled and developed, human resources who are intellectual in thought or reasoning, clever in judgment, and critical in problem-solving will be formed. The study of reading should emphasize the development of the skill of thinking creatively and independently in order to discover various methods and techniques for remembering, processing, and identifying messages or information inside the text being read. The ability to reason and think clearly, as well as understand logical relationships between ideas or events, is referred to as critical thinking. Almost every student, including children who have never attended the school, carries and operates a device. They use their devices to access various types of information, such as the text, images, sound, and video. The issue is that not all of the data can be accounted for. There is information that is only partially correct. There is also something that is completely false. There is some false information. Without any of the ability to evaluate information critically, our children may ingest false, even inaccurate statements, which can harm not only them or their families, but also others.

When it comes to the capability to critically think through reading comprehension, debating thought or thinking skills that emphasize how to analyze and evaluate a discourse is essential. Critical thinking and reading comprehension are two intellectual tasks that students should master. When reading, students are

required to have broad ideas and perspectives. These ideas can be gleaned from reading, observation, and discussion.

In light of foregoing explanations, the researcher is willing to learn more about the relationship between students' critical thinking skills and reading comprehension. As a result, the researcher intends to perform this research at Universitas Negeri Makassar with the heading "The Correlation Between Students' Critical Thinking Skills and their Reading Comprehension at Undergraduate Study Program English Department Faculty of Languages and Literature Universitas Negeri Makassar"

#### **METHOD**

This study intends to uncover students' critical thinking abilities, reading comprehension, and the relationship between students' critical thinking abilities, reading comprehension. To address the mentioned goals, this study applied quantitative methods, Because the phenomena of the observations were converted into numbers, statistical techniques should be applied to analyze the results of this study. This study employs the correlation technique to determine the direction, and data was collected using the test method.

This study's population consists of fifth semester English Education students at the Universitas Negeri Makassar. There were four classes at the English study program year of intake 2022. Each class had about 37 students in it. Thus, the overall population was 148 students. The researcher employs the cluster random sampling technique in this study. It indicates that each class has the same chance of being chosen as a sample. As a result, two classes have been chosen as the sample for this study. The researcher selects two of the four classes at random to serve as the research sample. In carrying out research, the researcher collects the data through two steps which are conducting and distributing the questionnaire and conducting reading test.

After collecting all the data, the researcher assessed and calculated the questionnaire outcomes to identify the students' level of critical thinking skills. The researcher also assesses and calculates the results of the students' reading tests to determine the students' reading comprehension qualification. Furthermore, to ascertain the relation between the variables, the data was processed using SPSS 21.

# FINDINGS AND DISCUSSIONS Findings

This study's findings were divided into four sections: (1) Students' critical thinking skills (2) Students' reading comprehension (3) The classification of the students' critical thinking skills in relation to their reading comprehension level and (4) The relationship between the students' critical thinking skills and their reading comprehension.

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# Students' Critical Thinking Skills

This section addresses the first research question, which is about the critical thinking skills of fifth semester English Education Study Program students at Universitas Negeri Makassar in the academic year 2022/2023.

After the students completed the questionnaire, the results were analyzed by adding up the answers and writing the total. The table below describes the descriptive statistics analysis results of the students' critical thinking skill.

**Table 1 Descriptive Statistics of Students'** 

## Critical Skills

	Categories		Mean		Std.		
	High			Val	Categor	Deviatio	
		m	w	ue	y	n	
Critical	59.3	33.9%	6.8	3.5	High	14.82	
thinking	%		%				
Skill	70		,,				

Table 1 displays, descriptive statistics about the students' critical thinking abilities. According to the table, 59.3% of the students had a high critical thinking skill, while only 33.9% had a medium level and 6.8% had a low level. This demonstrates that nearly half of the students use critical thinking skills while taking a reading comprehension test to assimilate new information on to any of the current structure, which includes interpretation, analysis, evaluation, inference, explanation, and self-regulation.

## Students' Reading Comprehension

The second objective of this research was to find out the students' reading comprehension of the fifth semester students of English Education Study Program Universitas Negeri Makassar in academic year of 2022/2023.

The following table summarizes the findings of descriptive statistics on students' reading comprehension.

Table 2

	N	Minim	Maxim	Mean	Std.
		um	um		Deviation
reading comprehension	59	27	91	65.54	13.842
Valid N (listwise)	59				

Descriptive Statistics of Students' Reading Comprehension

The students' reading comprehension descriptive statistics are shown in Table 2. It mentions that there were 59 students who took the reading test. The students' lowest score was 27, while their highest score was 91. Furthermore, the students' mean score was 65.54, with a standard deviation of 13.84.

Furthermore, the data frequency distribution presented in the following table shows the students' rate percentage of reading comprehension achievement.

Table 3 Distribution of Students' Reading Comprehension Achievement

Range	Category	Frequency	Percentage
80-100	Excellent	10	17%
70-79	Good	16	27.20%
60-69	Average	15	25.50%
50-59	Poor	12	18.70%
0-49	Very Poor	6	10.20%
-	Total .	59	100%

Table 3 shows the distribution of the students' score of reading comprehension. It reveals that most of the students (27.20%) got a good category in reading comprehension. There were 10 students (17%) obtained excellent category, 15 students (25.50%) got an average category, 12 students (18.70%) got poor category and six students (10.20%) got very poor category.

The students' scores were also analyzed more specifically based on the type of question. The results of the analysis are shown in the table below.

Table 4 Descriptive Statistics of Students' Score Based on Question Types

<b>Questions Type</b>	Number of Question	Mean Score	Std. Deviation
Literal	15	74	14.07
Inferential	15	61	16.86
Critical	15	61	19.25

Tabel 4 provides descriptive data for the students' reading comprehension scores depending on the question type. The mean score of the students' literal comprehension was 74, with a standard deviation of 14.07. The mean score of the students' Inferential comprehension was 61 with standard deviation 16.86. On the other hand, the mean score of the students' critical comprehension was 61 with standard deviation 19.25. It is possible to conclude that the students' literal comprehension exceeds their inferential and critical comprehension.

# The Classification of Students' Critical Thinking Skills towards Students' Reading Comprehension Level

This section addresses the third research question, which is about categorizing the students' critical thinking skills in relation to their reading comprehension levels of fifth semester English Education Study Program students at Universitas Negeri Makassar in the academic year 2022/2023.

The table below provides descriptive data of the classification of the students' critical thinking skills on the students' literal comprehension:

Table 5 Descriptive Statistics of Students' Critical thinking Skills level on Classification of Students' Literal comprehension

Students' Critical Thinking level		Students' literal comprehension				
Category	Percentage	Excellent	Good	Average	Poor	Very Poor
High	59.32%	25	5	5	0	0
Medium	33.89%	4	2	9	1	4
Low	6.77%	1	0	1	1	1

Table 5 shows statistical data for the students' critical thinking skills score and the classification of students' literal comprehension. According to the table, the majority of students have a high level at critical thinking skills, with a percentage of 59.32%. The students' literal comprehension was classified into five categories. At the high level of students' critical thinking skills, there were 25 students with excellent literal comprehension, 5 with good literal comprehension, 5 with average literal comprehension, and none with poor or very poor literal comprehension. Four students had excellent literal comprehension, two had good literal comprehension, nine had average literal comprehension, and one had very poor literal comprehension at the medium level of students' critical thinking skills. There was one at the excellent, average, poor, and very poor literal comprehension categories and none in the good category among students with low critical thinking skills.

The descriptive statistics of the classification of students' critical thinking skills on students' inferential comprehension are shown in the table below:

Table 6 Descriptive Statistics of Students' Critical thinking Skills level on Classification of Students' Inferential comprehension

Students' Critical Thinking level		Students' Inferential Comprehension				
Category	Percentage	Excellent	Good	Average	Poor	Very Poor
High	59.32%	9	8	12	4	2
Medium	33.89%	0	0	7	4	9
Low	6.77%	0	0	0	0	4

Table 6 displays descriptive statistics for the students' critical thinking skills level and the classification of inferential comprehension. At a high level of critical thinking skills, there were 9 students with excellent inferential

comprehension, 8 with good inferential comprehension, 12 with average inferential comprehension, and none with poor or very poor inferential comprehension. At the medium level of critical thinking skills, there were seven students with good inferential comprehension, four in the average category, nine at the very poor category, and none in the excellent or good category. At the low level of critical thinking skills, there were four students in the very poor inferential comprehension and none in the excellent, good, average, or poor categories.

The table below shows the descriptive statistics of the classification of the students' critical thinking skills on the students' critical comprehension.

Table 7 Descriptive Statistics of Students' Critical thinking Skills level on Classification of Students' Critical comprehension

Students' Critical Thinking level		Students' Critical Comprehension				
Category	Percentage	Excellent	Good	Average	Poor	Very Poor
High	59.32%	16	6	7	5	1
Medium	33.89%	1	0	6	3	10
Low	6.77%	0	0	0	0	4

Table 7 shows descriptive statistics for the critical thinking skills level and critical comprehension classification of the students. At a high level of critical thinking, there were 16 students with excellent critical comprehension, 6 with good critical comprehension, 7 with average critical comprehension, 5 with poor critical comprehension, and 1 with very poor critical comprehension. Critical thinking abilities at a medium level, there was one student with excellent critical comprehension, six average students, three poor students, ten very poor students, and no good students at the medium level of critical thinking skills. At the low level of critical thinking skills, there were four students in the very poor category of critical comprehension, none in the excellent, good, average, or poor categories.

# The Correlation between Students' Critical Thinking Skills and their Reading Comprehension.

In this section, you must respond to two hypotheses. They are (H1), stating that there is a significant correlation, and (H0), indicating that there is no significant correlation. To put the hypothesis to the test, the author collected the students' CTDSRF questionnaire and reading test results, The data was then analyzed to determine the relationship between the variables using the Person Product Moment formula. The correlation computation result is shown in the table below.

Table 8 The Result of Correlation Analysis between Students' Critical Thinking Skills and Reading Comprehension

		critical thinking	reading comprehension
critical thinking	Pearson Correlation	1	.754**
	Sig. (2-tailed)		.000.
	N	59	59
reading comprehension	Pearson Correlation	.754**	1
	Sig. (2-tailed)	.000	
	N	59	59

Table 8 above shows that the correlation coefficient of critical thinking skills and reading comprehension was (r) = 0.754 with the Sig. (2-tailed) of 0.000 which is lower than 0.05It shows that there was a significant relationship between the two variables. The result also demonstrates that the correlation is positive as the value is in positive number (r=0.754). As a result, the first hypothesis can be interpreted as accepted, whereas the null hypothesis is rejected. In many other phrases, students with strong critical thinking abilities are more inclined to have excellent reading comprehension skills.

According to the data description, there was a relationship between students' critical thinking abilities and their reading comprehension. The correlation coefficient obtained is 0.754, which falls within the range of 0.600 - 0.799. As a result, the relationship is classified as strong. Critical thinking skills of students in the fifth semester of the English Education Study Program at Universitas Negeri Makassar in the academic year 2022/2023 contribute to reading comprehension.

#### **Discussion**

According to the study's findings, the majority of undergraduate English education students possessed a high level of critical thinking skills. Similarly, Juniardi (2018) discovered that the majority of students at Universitas Atmajaya Indonesia possessed strong critical thinking abilities. He stated that the higher the students' level of reading comprehension, the greater their critical thinking. Some students, however, have moderate or low critical thinking skills, as discovered by (Lutfiyana et al., 2021). The critical thinking skills of Universitas PGRI Semarang students are classified as medium in terms of providing explanations for answers to questions because they understand the context of the questions with short and directed answers. Furthermore, Afriana et al. (2021) discovered that senior high school students' critical thinking skills remained in the medium range when solving HOTS-type national exam questions.

Reading allows people to learn a wide range of skills. This is probably the most essential skill that many students must master in order to succeed not only in

English but also in any other subject that appears to require English reading. This research finding provided evidence of students' reading comprehension is categorized as a good qualification. It is derived from the mean score of students' reading tests that was classified as good category. This is in line with Italia et al. (2018) discovered that most students have good ability in reading comprehension because they have been accustomed to reading many types of text and taking some comprehension tests. Hidayati (2018), her research, on the contrary side, revealed that most students have difficulty reading English text from factual and expository materials taken from newspapers, articles, textbooks, and magazines. It can be argued that students are unable to comprehend the text because its primary purpose is to inform the reader about the issue.

Students with good critical thinking can complete the reading comprehension test well. The students can identify and memorize facts, identify important ideas, and supporting details, and categorize and understand how the text is organized. They can also determine what the author means by what is said, integrate information, and develop conclusions or inferences. At the same time, the students with low critical thinking cannot complete the reading comprehension test well because the student is not able to use existing information to generate new information or thoughts, control word meaning, phrases, and sentences, and extract the appropriate meaning from texts.

The study discovered a relationship between critical thinking abilities and reading comprehension, with a strong correlation. It appears that the greater critically students think, the better their reading comprehension results. It is most likely related to the critical thinking skills required, such as interpretation, analysis, evaluation, inference, explanation, and self-regulation, which aided them in comprehending the diverse literature. Shihab (2011) asserts that reading is a cooperative process that the reader generates assuming on purpose using a series of thinking skills. In order to recognize the author's intended meaning, readers must interpret, analyze, evaluate, and draw conclusions.

Forood and Farahani (2013) examined the possibility of important differences in the acting skills of low and high critical thinkers on validity, responsibility, and reasoning educational barriers. According to the findings of his study, there has been a significant distinction in comparing people's reading abilities with low and high critical thinking skills. Furthermore, Hosseini et al. (2012) examined the connection among both abilities to think critically, reading comprehension, and reading strategies. The outcomes indicate a connection between readers' ability to think critically and their reading ability. According to the findings, the best predictors of reading comprehension are affective and cognitive strategies, as well as the ability to think critically.

### **CONCLUSION**

It could be concluded that many students these days have a strong ability to think critically. The majority of students had a high proclivity for critical thinking while reading English texts, which included interpretation, analysis, evaluation, inference, explanation, and self-regulation, according to this study. Students with high critical thinking skills were able to complete the reading comprehension test properly and correctly; it has been demonstrated that almost all students have good categories at each level of reading, particularly in literal comprehension. While students in the low critical thinking category were unable to complete reading comprehension, it is clear that students at this level are on average at poor and very poor levels. The researcher concludes that there is a significant correlation between critical thinking skills and reading comprehension based on the findings and discussion in the previous chapter. Students who have high critical thinking skills have excellent reading comprehension. Students who are lacking critical thinking abilities, on the other hand, often find it difficult in reading comprehension. Correlation coefficient Pearson Product Moment, which has a value of 0.754, demonstrates this. This means that the correlation was strong as in 0.600-0.799 range. As a result, it is possible to conclude that Students who think critically are more creative and critical in their understanding of ideas.

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