



The Influence of Cognitive Strategies Towards Student Ability In Determine The Main Idea In Descriptive Text

Wahyu Satya Gumelar¹, Nadia Cinta Khoerunnisa^{2*}

nadiacintakhoerunnisa16@gmail.com^{2*}

^{1,2}Program Studi Pendidikan Bahasa Inggris

^{1,2}Universitas Islam Nusantara

Received: 04 05 2024. Revised: 25 06 2024. Accepted: 10 06 2024.

Abstract : This research aims to identify the influence of cognitive strategies toward student ability in determining the main idea in descriptive text. This research uses quantitative research methods, using the preexperiment method with the design of the one group pretest posttest. The researchers uses tests as a data collection technique, then pretest and posttest as research instruments. Participants in this research were 52 class XI students of SMK 2 LPPM RI Majalaya. Research data shows that cognitive strategies help students in determine the main idea in descriptive text. Students can demonstrate better reading comprehension skills. This data is supported by the pretest results which have a mean value of 52.02 and posttest results which have a mean value of 87.92. Furthermore, the results of hypothesis test using paired sample t-test method show that there is a significant influence of the use of cognitive strategies toward students ability to determine the main idea in descriptive text with the Sig value. < 0.05 or $0.001 < 0.05$. Based on the research results, cognitive strategies influence students ability in determine the main idea in descriptive text.

Keywords : Cognitive Strategies, Student Ability, Reading Comprehension, Main Idea, Descriptive Text.

INTRODUCTION

The importance of English as an international language is increasing in the current era of globalization, making mastery of English a crucial need. According to Crystal (1997) the number of people who use English today exceeds those who use any other language in world history. English is considered the most dominant international language (Clyne et al., 2008). According to (Wahyono, 2019) English is not only an international communication tool, but also the key to accessing and understanding information through various reading materials. Therefore, one of the keys in this process is reading comprehension. Reading is one of the language skills that a person needs to master (Oktavianti, 2019). A person is constantly exposed to various forms of text reading in everyday life. Reading comprehension of a text is very important for readers because understanding shows that the reader has been able to understand the messages or all the information the author wants to convey. According to Harris and Hodges

How to cite: Gumelar, W. S., & Khoerunnisa, N. C. (2024). The Influence of Cognitive Strategies Towards Student Ability In Determine The Main Idea In Descriptive Text. *Jurnal Simki Pedagogia*, 7 (1), 296-304.

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(1981) as cited in Rizal (2018) the essence of reading comprehension is understanding the reading according to the meaning or message desired by the author. Thus, reading comprehension is basically a reading activity carried out by someone with the aim of capturing the content or meaning contained in discourse in depth and comprehensively (Rizal, 2018).

However, when learning to read English, students have several problems, such as needing a reading strategy to determine the main idea of the text. As in research conducted by (Zhang et al., 2020), the problem that occurs is the lack of reading comprehension of students who don't use strategies in reading. As the results of research show that students in the experimental group who received learning using cognitive and metacognitive strategies in reading lessons showed greater improvements compared to the control group who didn't receive treatment. The experimental group experienced an increase of 17.0% and 19.8%, while the control group experienced an increase of 9.6% and 12.9%. In addition, according to (Asmara, 2017), as many as 63.33% of the total 30 students as participants did not read the title to find out the contents of the text. It shows that more than half of the participants, who are known to have no strategy in reading comprehension.

For the problems that occur, the author uses cognitive strategies as a method of teaching reading. According to Jean Piaget (1927) cognitive is the process of adaptation in a child and the thought process in understanding objects and all events around him, so effective cognitive strategies in children's cognition include the use of experimental, observational, and analytical methods to understand and predict events that happen around them. According to Chamot and O'Malley (1996), cognitive reading strategies are techniques that help students complete reading activities. Oxford (1990) develops it further by describing it as techniques such as note-taking, summarizing, concluding, applying previous knowledge; make predictions, analyze, and use clues from context (Lawrence, 2007). The use of reading strategies is the key to success in reading activities. Without implementing these strategies, a person will face difficulties in understanding the meaning of a text, so it is important to understand and apply an effective reading approach to improve overall understanding and reading skills (Oktavianti, 2019). Thus, the use of internal reading cognitive strategies became a solid foundation for improving reading skills and text understanding in the evolving information age.

In this research, the researchers want to know what the influence of cognitive strategies toward student ability in determine the main idea in descriptive text. According to Beech (2005) the main idea is what the paragraph is about. In answering questions, we identify the main idea to provide an overview (Beech, 2005). According to Willawan (2012) as cited in Fauzi (2020)

main idea is a key sentence that influences the development of other sentences in a paragraph, it is usually explicit or implied. Meanwhile, according to Kane (2000) as cited in (Handayani, 2020) descriptive text is the description and identification of the structure text such as person and thing. One of the main purposes of descriptive texts is to provide a profound, complete, and detailed picture of an object, location, or individual. Descriptive text is a type of text that concentrates on a detailed description of a particular location, object, event, person, or place (Handayani, 2020). The aim of this research is, firstly, to identify students' abilities before and after applying cognitive strategies in determining the main idea in descriptive text, and secondly to identify the influence of cognitive strategies toward student abilities in determining the main idea in descriptive text.

RESEARCH METHODS

The study uses a quantitative approach as it is intended to measure the relationship between cognitive strategies and student reading comprehension, and to identify the influence of cognitive strategies toward student reading comprehension in determining the main idea in descriptive texts. A quantitative approach is a systematic research method that involves the collection and analysis of numerical data (Fraenkel et al., 2012). The research design of this research is preexperimental design. According to Ary et al. (2010), Preexperimental designs are research designs that provide little or no control over extraneous variables. This design lacks the controls necessary to establish a cause-and-effect relationship between the independent and dependent variables. In this study, researchers used One-Group Pretest–Posttest Design. Where this design has a pretest before being given treatment, and posttest after being given treatment. The one-group pretest-posttest design is an experimental research method that involves one group being measured or observed not only after being given a treatment, but also before (Fraenkel et al., 2012). A diagram of this design is as follows.

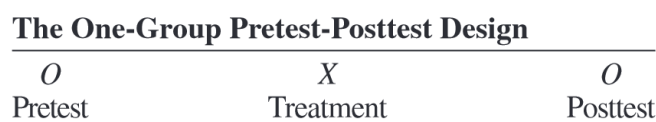


Figure 1. One-Group Pretest-Posttest Research Design Source

The research instrument uses pretest and posttest. The researchers uses a pretest to know students' ability in determine the main idea in descriptive text before applying cognitive strategies in learning. And then, the posttest is used to determine students' abilities after applying cognitive strategies.

The data collection technique used in this research is by using tests. According to Ary et al. (2010), a test is a series of stimuli given to a person to produce a response that is then evaluated numerically. In this research, tests are carried out to measure students' abilities, so the tests used are a form of achievement tests (learning outcomes), namely tests used to measure a person's achievement after learning something. The instruments used in this experimental research are pretest and posttest which contain questions. Both have the same question characteristics, the only difference is the time of implementation, namely the pretest is carried out at the beginning before treatment while the posttest is carried out after completion of treatment. And then, the validation test in this research uses content validity, evidence based on test content. Evidence based on test content is a type of evidence related to the content of the test and its relationship to the construct you want to measure (Ary, Jacobs, and Razavieh, 2010). Based on the results of the validity content tested on an English teacher at SMK 2 LPPM RI Majalaya, it can be concluded that the indicators in all questions on the variables are acceptable and valid, therefore the research and testing can be continued. And then, researchers used Pearson Bivariate Correlation to test reliability using the IBM SPSS Statistics computer program. Based on the results, the values obtained for rater 1 and rater 2 are $\text{Sig. } 0.001 < 0.05$. Therefore, the question items in this research have high reliability results and are stated to be good.

Data analysis used in this research uses several steps, as follows. It starts with descriptive statistics to summarize data using measures such as mean and median. Furthermore, analyze the pretest and posttest frequency and percentage data to determine the distribution of scores and percentile rankings. After that, carry out a normality test to determine whether the data follows a normal distribution, this is done to choose the appropriate statistical test. And then, the hypothesis test is the null hypothesis (H_0) and alternative hypothesis (H_a) which aims to ascertain whether cognitive strategies have a significant effect on students' abilities or not. The paired sample t-test is used for hypothesis testing using IBM SPSS Statistics. This research was conducted at SMK 2 LPPM RI Majalaya. This school is located on Jl. Cidawolong No. 7 Biru Village, Majalaya District, Bandung Regency. According to Fraenkel, Wallen, and Hyun (2012), the population refers to the entire group of individuals, objects, or events intended to be studied and generalized from. Meanwhile, the sample is part of the population selected to be included in a research study. This is a subset that represents the larger population (Fraenkel, Wallen, and Hyun, 2012). In this study, the population comprises class XI students at SMK 2 LPPM RI Majalaya. The sample, a subset representing the larger population, consists of 52

class XI students selected through purposive sampling, chosen deliberately based on research objectives and relevance to the study material.

RESULTS AND DISCUSSION

The results of data analysis in this study used descriptive statistics. Descriptive statistics refers to the techniques used to organize, summarize, and describe data or observations that have been collected (Ary et al., 2010). The results of descriptive statistical tests in this research are as follows.

Table 1. Descriptive Statistic

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	52	39	62	52,02	5,429
Posttest	52	70	100	87,92	9,381
Valid N (listwise)	52				

The pretest and posttest scores of experimental group students are distributed in the following table to analyze reading comprehension scores in determining the main idea in descriptive text before and after being given treatment. Then it is presented using the frequency distribution in the following table.

Table 2. Frequency and Percentage Data of Pretest and Posttest

No.	Classification	Score	Pretest		Posttest	
			F	Percent	F	Percent
1	Very Good	91-100	-	-	19	36,5%
2	Good	76-90	-	-	24	46,2%
3	Neutral	61-75	1	1,9%	9	17,3%
4	Poor	51-60	29	55,8%	-	-
5	Ver Poor	0-50	22	42,3%	-	-
	Total		52	100%	52	100%

The results of the student's pretest and posttest will then be tested using normality testing. The normality test is intended to test whether the data used in research has a normal distribution or not (Abdullah, 2015). In this study, researchers used the IBM SPSS Statistics computer program with the Kolmogorov Smirnov test. The results of the normality test in this study are as follows.

Table 3. Normality Test

	Test of Normality		
	Kolmogorov-Smirnov ^a		
	Statistic	df	Sig.
Pretest	,093	52	,200*

Posttest ,107 52 ,200

After the results of the normality test are normal, the next test is the hypothesis test. Hypothesis testing was carried out to test whether the null hypothesis (H0): there is no significant influence of cognitive strategies on students' ability to determine the main idea in descriptive text, or alternative hypothesis (H1): there is a significant influence of cognitive strategies on students' ability to determine the main idea in descriptive text. In this study, researchers used the paired sample t-test method to test the research hypothesis. Paired sample t test refers to a statistical method used to compare the means of two different groups of data (Ary et al., 2010). The proposed assumption is that the p-value is < level of significance 0.05, so H1 is accepted and H0 is rejected. The results of hypothesis testing in this research are as follows.

Table 4. Hypothesis Test

		Paired Samples Test					t	df	Significance	
		Paired Differences							One-Sided p	Two-Sided p
		Mean	Std. Dev	95% Confidence Interval of the Difference						
				Std. Error	Lower				Upper	
Pair 1	Pretest - Posttest	-35,904	11,442	1,587	-39,089	-32,718	-22,628	51	<,001	<,001

Based on the analysis of data obtained using the preexperiment method with the design of the one group pretest posttest, it can be seen that there is an influence of cognitive strategies toward students ability to determine the main idea in descriptive text between the pretest and posttest in the experimental class. It can be seen that the average value of students' cognitive abilities is obtained from the pretest and posttest results. The results of the descriptive statistical analysis in the table above show that in the pretest value, the number of samples or data used was 52 samples or data, the minimum value was 39 and the maximum value was 62 with the mean value of 52,02 and a standard deviation of 5,429. Meanwhile, for the posttest value, the number of samples or data used was 52 samples or data, the minimum value was 70 and the maximum value was 100 with the mean value of 87,92 and a standard deviation of 9,381.

Based on the results above, there were significant changes in the distribution of participants' score classifications before and after the treatment was carried out. Before the intervention, the majority of participants (55.8%) were in the "Poor" score category, while after treatment, only a small portion of participants (17.3%) remained in the "Neutral" category. In

contrast, there was a marked increase in the more positive score categories after treatment. The number of participants achieving a "Very Good" score increased to 36.5% from 0%, while participants in the "Good" category also experienced a significant increase from 0% to 46.2%. This shows that the treatment was effective in improving the quality and outcomes of participants, with more participants achieving higher scores after the intervention.

The results of the data obtained were that the average or mean pretest score was 52.02, which was lower than the posttest score, namely 87.92. Meanwhile, from the results of hypothesis testing using the paired sample T-test, the Sig value is known. of 0.001. According to the decision making rules in the paired sample T-test, the Sig. < 0.05 or 0.001 < 0.05, this shows that there is a significant influence of the use of cognitive strategies toward students ability to determine the main idea in descriptive text

CONCLUSION

Based on the results and discussion, the researcher concluded that the Cognitive Strategy was effective in improving the reading comprehension skills of class XI students at SMK 2 LPPM RI Majalaya in determining the main idea in descriptive text. This is proven by the average pre-test score of (52.02) compared to the average post-test score of (87.92). Before the treatment was carried out, the majority of students were in the "Poor" score category (55.8%), with the majority (42.3%) in the "Very Poor" category, only 1.9% in the "Neutral" category. After treatment, significant changes occurred: 36.5% reached the "Very Good" category, 46.2% in the "Good" category, while 17.3% remained in the "Neutral" category. This shows a positive increase in the participant's score after the treatment was carried out. The analysis results show that the average pretest score (52.02) is lower than the posttest score (87.92). Hypothesis testing using the paired sample t-test shows the Sig value. of 0.001. Because Sig. < 0.05, this shows a significant influence of the use of cognitive strategies toward students' ability to determine the main idea in descriptive text.

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