

THE INFLUENCE OF METACOGNITIVE STRATEGIES TOWARDS STUDENTS' READING COMPREHENSION

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A B S T R A C T

The purpose of this research is to ascertain the impact of metacognitive methods on students' reading comprehension as well as the attitudes of students about their usage. According to (Navarro, 2021), metacognition is the awareness of and control over one's own thinking and learning processes. Quantitative research is carried out using an experimental research design. Tests and questionnaires were employed by researchers as data collection tools. In this research, two classes—X.6 (Control Class) and X.7 (Experimental Class)—were chosen using cluster random sampling. According to the findings, the experimental group's average post-test score was 83.29, whereas the control group's was 78.57. The independent sample t-test was shown to have a lower (two-tailed) significance of 0.010 (0.010 0.05). Then, in the control class, 0.010 (0.010 0.05) is shown. As a result, H_0 is considered unacceptable but H_a is welcomed. Conclusion: Students' reading comprehension is impacted by metacognitive tactics used in reading instruction. In addition, the researcher also got the results from the questionnaire data, the majority of experimental class students agreed and strongly agreed on the three items given on the affective, behavioral and cognitive aspects. It can be assumed that most of the experimental class students were influenced by Metacognitive Strategies in improving reading comprehension.

Introduction

Reading is the most important element of learning a foreign language, especially when learning English. The benefits of reading may be shown by demonstrating increased knowledge and information on both broad and specialized areas, such as English classes in school. Reading is a difficult conscious and unconscious mental activity, according to (Wahyono, 2019), in which the reader employs a variety of techniques to piece together the meaning that the author is presumed to have intended using information from the text and their own past knowledge. Additionally, a reader must comprehend what is being stated in a book while reading it in order to fully engage with it. According to (Saputra & Susilo, 2019), reading motions, such as saying the words aloud or moving your attention over the page from left to right, are examples of reading movements. According to (Saputra & Susilo, 2019), comprehension is the capacity to see beyond words and comprehend the links between the concepts expressed in a text. Therefore, after reading the text, the reader must comprehend the author's intended meaning. This indicates that comprehension is crucial while reading a material.

Reading is a skill that every educated person must have and be competent in, both in their own language and in a second or foreign language. Reading is one of the most important language skills. Kids may develop additional language skills via reading, such as writing and speaking, in addition to language components like vocabulary and grammar. (Georgievna, 2020) argues that “there is a constant interaction between listening, speaking, reading and writing, besides that it is clear that in lessons that are ostensibly labeled 'reading', there are opportunities for language learners to develop other languages skills.” So that students may better grasp texts and have strong skills, especially in reading

comprehension, teachers must teach reading in an integrated manner with other language skills in order to support and advance students' reading skills.

In reading learning which has been carried out so far only emphasizes mastery of cognitive concepts captured by objective written tests, while the space for metacognition is less empowered. Learning activities like this make students tend to memorize without understanding what the teacher is teaching. As a result, when students are faced with problems, students have difficulty solving them. The phrase "reading strategy," according to (Hervina, Nifriza, Afdaleni, & Thampisa, 2022), refers to "the cognitive activities that take place when readers approach a text with the intention of making meaning of what they read. Reading strategies may be thought of in this way as the comprehension techniques that readers use to make sense of what they have read.

By using methods, readers may improve their reading comprehension as well as their ability to analyze what they have read. This connects back to the method the instructor used to create it. Applying the same instructional technique to all students without taking their thinking abilities into account would put them at a disadvantage since groups of students who are critical thinkers will be at a disadvantage, claims (Oktoma, Rafli, Rahmat, & Lustiyantie, 2021). A metacognitive method is one of the best for improving reading comprehension. The development of reading comprehension requires the use of this method heavily. (Oktoma, Rafli, Rahmat, & Lustiyantie, 2021) asserts that the use of metacognitive learning techniques results in students who are more persuasive and Thoughts may be maintained, planned, and controlled by metacognition.

Students may easily acquire new knowledge to improve their language abilities by using metacognitive tactics to help them grasp what they are learning. "Metacognitive strategies are considered as high-level executive skills that utilize knowledge of cognitive processes and are attempts to regulate self-directed learning through planning, monitoring, and evaluation," according to (Risnawati, Meisura, & Amir, 2019). Students may acquire focus on reading processes by engaging in self-monitoring and self-regulating metacognitive methods. Simply put, it may be claimed that pupils are able to anticipate, monitor, and assess the text's content before they begin reading thanks to metacognitive methods. Therefore, metacognitive strategies are techniques that students utilize to aid in their understanding of what they are studying, from which they easily acquire new knowledge to advance their linguistic abilities. Additionally, this approach may reduce the different issues and challenges pupils may have while trying to grasp a material they have read.

Students in Kuningan's class X SMA who are practicing teaching do not know the word's definition. It results from kids' reading comprehension proficiency in vocabulary. They merely read the text; they have no idea what it truly says, particularly in English. If the terminology is challenging, students are too sluggish to check the dictionary; instead, they guess and cheat by copying their peers. Students are also unable to respond to questions from the book. due to pupils' difficulty comprehending the text's fundamental premise. They didn't choose the text as the response because they understood its meaning, but rather because it matched the text question.

Based on the aforementioned considerations, researchers will employ the teaching process of deep metacognitive methods to assess students' progress in reading comprehension. The motivation of scholars to conduct study under the heading "The Influence of Metacognitive Strategies Towards Students' Reading Comprehension" is as a result.

Research Method

The methodology for doing this study will be quantitative experimental research. According to (Metalin & Puspita, 2020), experimenting entails attempting, looking, and verifying. The study was conducted using a quasi-experimental methodology. Because the researcher cannot intentionally establish groups for the experiment, quasi-experiments include scenarios in which the writer distributes individuals to Classes, albeit not at random.

For the academic year 2022–2023, this research chose SMAN 1 Jalaksana pupils in the tenth grade. The population in this research consisted of seven classes: X1, X2, X3, X4, X5, X6, and X7. In each class, there are 35 students. The overall sample size for this research was 245 students. A sample of 70 students was chosen for this investigation. Class X.6 was chosen by the researcher as a sample in the control class, with a total of 35 students, and class X.7, with a total of 35 students, was chosen by the researcher as a sample in the experimental class.

Technique of Collecting Data

To get the essential information, researchers employed tests, interventions, and questionnaires. Research should focus on two tests. Pre- and post-testing examples include. Learn how metacognitive strategies may help pupils understand what they are reading. the two stages of therapy, next. In order to understand students' perspectives regarding the impact of adopting metacognitive methods on improving reading comprehension, a questionnaire was employed to define such attitudes.

Researchers utilize SPSS version 25 for Windows, which includes the Validation and Reliability Tests, the Test of Normality Distribution, the Test of Homogeneity Variance, and the Independent Sample Test, to analyze the data.

Result and Discussion

Result

After administering pre- and post-tests to pupils, researchers gather data. For as many as 35 students in the X6 class and X7 class, pre-test and post-test sessions were held.

Table 1. Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test_Experiment	35	55	90	71.43	8.793
Post-test_Experiment	35	70	95	83.29	7.664
Pre-test_Control	35	55	90	74.71	7.947
Post-test_Control	35	65	95	78.57	7.233
Valid N (listwise)	35				

Students in the experimental group and the control group both received the pre-test and post-test sessions. Before administering therapy and administering a post-test to students in the control class and the experimental class, the researcher performed a pre-test session. After administering a pre-test to students in the experimental class and the control group, researchers collected data. After administering the pre-test session, it is

known that the control class students' average score is 74.71. Student scores range from 55 to 90, with 55 being the lowest and 90 being the best. The researcher collected data by conducting a pre-test session in the experimental group. Students have an average value of 71.43. After examining the statistics, it is clear that the student with the lowest score is 55 and the student with the greatest score is 90.

Researchers collect data by teaching metacognitive techniques to students in the experimental group during the post-test session. The pupil received an overall grade of 83.29. The student's score ranges from 70 to 95, with 70 being the lowest and 95 being the greatest. In a study, pupils in the control group were taught reading comprehension using traditional teaching methods. The average student value is 78.57. The student's lowest score is 65, and their best is 95.

The researcher first calculated student data before efficiently obtaining data using SPSS version 25. When students from the experimental class took a post-test, it was discovered that the average score had risen. After looking at the statistics, it is clear that the experiment kids' average grade is greater than the class's average for the students in the control group. The average student score after taking the post-test is 83.29, it is known. In contrast, it was discovered that the control class's average student score on the post-test was 78.57. 4.72 is the difference. After examining the data, it is clear that using metacognitive techniques has a considerable impact on pupils in the experimental group. Implement metacognitive methods that are more significant for the experimental class's pupils than you would for the control class's students. The information already provided demonstrates that.

The hypothesis was validated once the researchers had initially evaluated the data. The t-test formula was used by the researchers.

Table 2. Independent Sample Test

		Levene's Test for Equality of		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Results of test	Equal variances assumed	.372	.544	2.647	68	.010	4.714	1.781	1.160	8.269
	Equal variances not assumed			2.647	67.773	.010	4.714	1.781	1.160	8.269

The experimental class's post-test independent sample test revealed that the (2-tailed) significance was less than 0.010 (0.010 0.05). The independent sample post-test conducted on the control class revealed that the significance (2-tailed) was less than 0.010 (0.010 0.05). As a result, Ho is considered unacceptable but Ha is welcomed. Furthermore, because the post-test results of the experimental class are higher than those of the control class, it is evident that there is a substantial difference in the post-test scores of the two classes. Thus, it may be inferred that adopting metacognitive methods while teaching reading has an impact on how well students understand what they are reading.

Only after the instruction, treatment, and post-test had been administered to the experimental class at the final meeting was the questionnaire sent to them. In this stage, students' opinions about the use of metacognitive strategies to enhance reading

comprehension are evaluated. 35 students from the experimental class participated in the survey. Students are presented with 10 questions. Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4), and Strongly Agree (5) are the five possible responses. The ten questions have three components: emotive, behavioral, and cognitive. These elements play a significant role in this explanation.

The results obtained from the questionnaire conducted are as follows:

Attitude Component	Statements	Items of Questionnaire				
		Strongly Agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
Affective	1	5 14%	30 86%			
	2	4 11%	31 89%			
	3	12 34%	23 66%			
Behavioral	4	4 11%	28	3		
	5		28 80%	7 20%		
	6	5 14%	29 83%	1 3%		
	7	15 43%	18 51%	2 6%		
Cognitive	8	5 14%	27 77%	3 9%		
	9	4 11%	31 89%			
	10	12 34%	23 66%			

Table 3. The result of Questionnaire

a. Affective Aspect

This aspect aims to determine the results of the questionnaire to determine students' attitudes towards the effectiveness of the Metacognitive Strategy in improving students' reading comprehension. Items included in the affective aspect are items at number 1, 2, and 3. The results of the questionnaire have been analyzed for items number 1, 2, and 3. Based on the responses, all students choose statements for item number 1 such as **"I like reading using strategies metacognitive"**, for number 2 as **"I feel excited when reading using metacognitive strategies"** for number 3 as **"Reading becomes more fun and enjoyable after I use metacognitive strategies"**.

Shows the affective aspect, for item number 1 it shows that 14% strongly agree and 86% agree that class X.7 students like learning to read using Metacognitive Strategies. For item number 2 it shows that 11% strongly agree and 89% agree from Student X.7 that most students feel excited when learning to read using metacognitive strategies, for item number 3 it shows 34% strongly agree and 66% agree, most students

X.7 agreed that learning activities became more fun and enjoyable after using metacognitive strategies.

Can concluded that from the items number 1, 2, and. In affective aspect, almost all students like and give a positive attitude in improving reading comprehension using metacognitive strategies

b. Behavioral Aspect

The second is the behavioral aspect. There are 4 items analyzed by the researcher. There are numbers 4, 5, 6, and 7. On the behavioral aspect, for number 4 most students in class X.7 strongly agree 11%, agree 80% and 9% undecided. "I will follow the learning process if the teacher uses metacognitive strategies", for item number 5 shows that 80% agree and 20% disagree for class X.7 students that "I will try to be an active learner if the teacher teaches using metacognitive strategies", item number 6 shows that 14% strongly agree, 83% agree, 3% are undecided so most students agree to question 6 students of class X.7 **"I will improve my reading comprehension after learning with metacognitive strategies"**, and the last item for number 7 most of the students in class X.7 are 43% strongly agree, 51% agree and 6% undecided. **"Metacognitive strategies are useful for improving my reading comprehension"**, Based on the results of the number questionnaire. it is assumed that almost all students of class X.7 agree and respond positively to the application of metacognitive strategies in the process of learning to read.

c. Cognitive Aspect

The last aspect is cognitive. There are 3 items in this aspect. These items are number 8, 9, and 10. For item number 8 it shows 14% strongly agree, 77% agree, and 9% undecided, **"I learn more effectively when the teacher provides reading material with metacognitive strategies"**, for item number 9 shows that 89% agree, 11% strongly agree **"I think my reading comprehension has increased after learning by using metacognitive strategies"** the last item number 10 shows that 34% strongly agree and 66% agree **"I think metacognitive strategies can help me to improve my reading comprehension."**

Discussion

The study of research findings related to the use of metacognitive methods in enhancing students' reading comprehension is the focus of this discussion. There are two goals for this study, which are based on the research questions:

1. To determine whether metacognitive strategies have an impact on students' understandin,
2. To determine how students feel about using metacognitive techniques for reading comprehension.

The experimental class's mean pre-test score was 71.42, whereas the control class's was 74.71, according to the researcher's calculations of the pre-test results for the two groups. It was determined that the scores for the two courses were roughly equivalent. Students in the experimental class received therapy while they studied English reading class by using metacognitive methods as a learning approach to enhance reading comprehension during reading learning activities before the post-test was administered. The post-test results of the students in the experimental class reaching 83.29, substantially different from the scores in the control class reaching 78.57, showed the impact of metacognitive methods in boosting reading comprehension. The outcomes of the t-test further corroborate this discovery since Sig. The result is less than the threshold of significance (0.0100.05). As a result, Ho is disqualified and Ha is approved, and there is

a large disparity between the experimental class's average post-test scores (78.57) and post-test (83.29).

Finally, the researcher has offered 10 statements in the form of questionnaire questions concerning learning using metacognitive techniques in order to ascertain students' perspectives about the effect of metacognitive methods in boosting students' reading comprehension.

Based on the results of the questionnaire data analysis, shows the affective aspect, for item number 1 it shows that **14%** strongly agree and **86%** agree that class X.7 students like learning to read using Metacognitive Strategies. For item number 2 it shows that **11%** strongly agree and **89%** agree from Student X.7 that most students feel happy when learning to read using metacognitive strategies, for item number 3 it shows **34%** strongly agree and **66%** agree, most students X .7 agreed that learning activities became more fun and enjoyable after using metacognitive strategies.

On the behavioral aspect, for number 4 most students in class X.7 strongly agree **11%**, agree **80%** and **9%** undecided. "I will follow the learning process if the teacher uses metacognitive strategies", for item number 5 shows that **80%** agree and **20%** disagree for class X.7 students that "I will try to be an active learner if the teacher teaches using metacognitive strategies" , item number 6 shows that **14%** strongly agree, **83%** agree, **3%** are undecided and the last item for number 7 most of the students in class X.7 are **43%** strongly agree, **51%** agree and **6%** undecided. The last aspect is cognitive.

There are 3 items in this aspect. These items are number 8, 9, and 10. For item number 8 it shows **14%** strongly agree, **77%** agree, and **9%** undecided. For item number 9 shows that **89%** agree, **11%** strongly agree, the last item number 10 shows that **34%** strongly agree and **66%** agree. It can be assumed that most students of class X.7 have a positive influence on Metacognitive Strategies in improving student learning outcomes, especially in reading.

The difference between my research and previous research is from the stages of the school method and also the time, then from the research that I use.

Then, because metacognitive methods have many advantages, here they are able to educate students to transfer or apply what they have learned in various settings, which makes students involved, curious, and more enthusiastic in learning to understand reading texts. With the help of metacognitive strategies, students can assess their abilities, determine how to approach problems, and independently create learning strategies that suit their learning preferences. As a result, their learning outcomes can accelerate and even outperform those based solely on cognitive strategies such as memorization, mnemonics, etc. Informative, enabling students to learn what is learned through independent learning or thinking. As a result, they are also quite happy to receive texts that must be read and understood by other scholars. From this it can be concluded that the majority of X.7 students in the experimental class believe that the use of metacognitive methods can help them become better readers.

Conclusion

These findings informed the research questions, which sought to ascertain whether or not first-year Jalaksana High School students viewed the use of metacognitive strategies to boost their reading comprehension and, if so, what impressions those students formed of such strategies. Independent t-test findings for the experimental group indicated that their mean pre-test score was 71.42 and their mean post-test score was

83.29, lending credence to the hypothesis that the experimental group improved significantly. Following therapy using a metacognitive approach. Meanwhile, without Metacognitive Strategies treatment, the control class's average pre-test score was 74.71 and their post-test score was 78.57. Since the average post-test score for the experimental group was 83.29, and the average post-test score for the control group was 78.57, it is clear that the two groups' outcomes were vastly different.

As can be seen in table 4.9, both the sig. (2-tailed) for the experimental group and the sig. (2-tailed) for the control group are less than the 0.05 threshold of significance. Therefore, H_a is accepted, indicating that there is a statistically significant difference between the pre- and post-test scores of the experimental class and the pre- and post-test scores of the control class.

Based on the results of the questionnaire data analysis, most of class X7 students (34% strongly agree and 89% agree) on the three items given on the affective aspect. In the behavioural aspect, most of the students (43% strongly agree, 83% agree, 20% are undecided) agree with the given item. Therefore, in the cognitive aspect, of the three items given, most of the students in class X.7 answered (34% strongly agree, 89% agreed 9% undecided). It can be assumed that most of the students in class X.7 are influenced by Metacognitive Strategies in improving student learning outcomes, especially in reading.

Since metacognitive methods may help students learn to transfer or apply what they have learned in multiple situations, they tend to pique students' attention, curiosity, and enthusiasm when it comes to learning to comprehend a reading material. Students can learn what is learned by learning or thinking on their own with the help of metacognitive strategies, which allow them to assess their own learning barriers, determine how best to address any challenges they encounter, and create personalized learning plans that take full advantage of their unique strengths and preferences. As a result, individuals experience elation whenever they are given a material intended for academic consumption. Therefore, it is safe to assume that the majority of the X.7 students in the control group also believe that metacognitive techniques may improve their ability to understand what they read.

References

- Abdullah, M. (2015). *Metodologi penelitian kuantitatif*. Aswaja Pressindo.
- Ahmada, A. (2020). USING GROUP WORK TO IMPROVE STUDENTS' READING COMPREHENSION SKILL. *Journey: Journal of English Language and Pedagogy*, 3(1), 14-18. <https://doi.org/10.33503/journey.v3i1.714>
- Ajideh, P, Zohrabi, M, & Poulalvar. (2018). The effect of explicit Instruction of metacognitive reading strategies on ESP reading comprehension in academic settings. *International Journal of Applied Linguistics and English Literature*, 77.
- Georgievna, Y. L. (2020). Opportunities of Meaningful Reading in Foreign Language . *A Multidisciplinary Peer Reviewed Journal*, 69 - 70.
- Ghaffar, M. A., & Aziz. (2019). The problems in reading skills of English among rural primary school pupils. *Religacion*, 149-154.
- Hervina, Nifriza, I., Afdaleni, & Thampisa, D. (2022). Metacognitive Strategy in Reading Comprehension. *Exposure: Jurnal Pendidikan Bahasa Inggris*, 418 - 419.
- Metalin, A., & Puspita, I. (2020). METACOGNITIVE ANALYSIS OF ELEMENTARY SCHOOL. *Indonesian Journal of Elementary Teachers Education (IJETE)*, 4 - 5.
- Navarro, Z. I. (2021). Metacognitive Strategies for Reading Comprehension in Basic Education Students. *Asian Journal of Education and Social Studies*, 35 - 36.

- Oktoma, E., Rafli, Z., Rahmat, A., & Lustiyantie, N. (2021). Learning Strategies And Thinking Skills In English Argumentative Writing Skills. *Review of International Geographical Education*, 1244.
- Risnawati, Meisura, A., & Amir, Z. (2019). Pengaruh Penerapan Strategi Metakognitif Terhadap Kemampuan Pemecahan Masalah Matematis Berdasarkan Terhadap Kemandirian Belajar Siswa BEDASARKAN TERHADAP. *ANARGYA: Jurnal Ilmiah Pendidikan Matematika*, 16 - 17.
- Saputra, D. S., & Susilo, S. V. (2019). The Implementation of Multiliteration Learning Models in Improving The Ability of Reading Comprehension for Fifth Grade of Primary School. *International Conference on Education*, 56 - 57.
- Wathoni, H., Purnama, B., Harianto, H., Wadi, A., Jaelani, S., & Ningsih, B. (2022). ANALYSIS ON EFL LEARNERS' CAPABILITY IN MASTERING TOEFL TEST ON READING COMPREHENSION. *Journey: Journal of English Language and Pedagogy*, 5(1), 114-119.
<https://doi.org/10.33503/journey.v5i1.1776>
- Wahyono, E. (2019). Correlation between students' cognitive reading strategies and reading comprehension. . *Jurnal Studi Guru Dan Pembelajaran*, 256–263.