

**Cognitive Strategies Use in Reading Comprehension and its Contributions  
to Students' Achievement**

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### **Abstract**

The study outlined in this article describes the use of cognitive strategies designed to aid the comprehension of Indonesian texts. It also examines the contributions of such strategies to students' comprehension scores. The participants were 97 students who had completed and passed the reading course. In collecting the research data, the researcher used a reading comprehension test instrument in the form of a cloze test, as well as a Likert scale questionnaire. The cloze test was used to measure the students' ability to understand the texts, while the questionnaire was used to obtain information about cognitive strategies used by students in comprehension of the texts. Data collection of the comprehension test results and understanding strategy data are performed sequentially over the same day. Research data are described and analyzed by product moment correlation technique. The research found that students' scores in cloze tests ranged from A to D. This score indicates that students have varying abilities in reading comprehension. The research findings also showed that students used various cognitive strategies in understanding text reading. The results of the correlation analysis showed that the use of cognitive strategy has a positive or negative contribution to the results of reading comprehension depending on the accuracy of the selection strategy in accordance with the text he read.

Keywords: cognitive strategy; text comprehension; contribution; reading score.

## Introduction

Reading ability is a main vehicle for the development of learning experiences and improved learning success. Hazzard (2016) states that reading makes a significant contribution to the success of the learner in completing their studies. Through the reading process, the learner can obtain the information required to fulfill the needs of their study assignments. In fact, the ability to read is crucial, thus the process of learning to read well plays an important role in achieving success in both study and in life.

People who read a lot can gain considerable useful information and knowledge in their lives. Anderson, Hiebert, Scott, and Wilkinson (1985) explain that reading is an activity needed by a person to gain useful knowledge in their life, both in school and outside school. In reality, we can see that people who read more are able to solve problems more easily than those who do not. The differences are seen more clearly in the learning activities, namely, those students who read more have different academic behaviors than those of students who rarely read. From these conditions, it can be said that interest in reading significantly influences the score of students' reading ability (Gambrell, 2011).

Reading comprehension is the mental process the reader goes through in an effort to understand the content of a reading text. OECD, as cited by Kendeou (2014), states that “reading comprehension is a process to understand, use, reflect on, and engage written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society”. Otto (1979, p. 147) explains that in comprehension of a reading, the reader not only pronounces written symbols, but also seeks to understand and interpret the information contained in the text. Tinker (1975, p. 7) reveals that the ability to read is basically the ability to understand the information conveyed by the author in the reading text. further, Smith and Robinson (1980, p. 205) describe reading as a process of interaction, involving a reader engaging with the information submitted by the author through the text. Through this process, the reader seeks to understand, evaluate, and utilize the information and ideas being presented.

In reading comprehension, to understand the text, the reader needs to apply a comprehension strategy appropriate to the text they read (Smith and Robinson, 1980, p. 205). These strategies include selecting, predicting, confirming, and validating the results of the understanding. The use of these strategies has an effect on the reader's success in comprehending the content of the text (Cohen, 1986, p. 133). This means that the use of the right strategy can optimize the results of comprehension while the use of inappropriate strategies can be a barrier to the success of comprehension.

In the learning process of reading, teachers should introduce and train students to utilize appropriate strategies in the comprehension of reading texts. In traditional teaching methods of reading, teachers generally only apply the principle of task, work, and evaluation. Through this principle, teacher-student interaction is achieved only by assigning tasks or questions to students; students working on and answering teacher questions; then teachers assessing student answers (Porath, 2014, p. 627). Such learning interaction does not provide a meaningful experience for students because students do not play an active role in building their learning experience.

In teaching reading comprehension, teachers need to direct student activities in order to get to know and use the correct reading strategy. The results of Francois's research (2016) show that in the process of learning reading, teachers can be models in reading comprehension

strategies. Teacher can give examples various reading comprehension strategies, for instance, including predicting, activating prior knowledge, making connections, setting purpose for reading, and making inferences. Francois (2016) thus states that “by doing so, internal comprehension processes are made explicit and students gain metacognitive knowledge of how and how to implement particular strategies to aid in their understanding of texts”.

In reading comprehension, readers use different strategies. The difference in strategy is due to differences in attitudes and cognitive styles that the reader has in responding to the information in the reading text. This fact is in accordance with the findings of research conducted by Pfister (cited in Sadeghi, 2012), which shows that students who have an open nature and a free field learning style have a high score in understanding the reading text. Brown (2007) explains that learning strategies have a close relationship with learning styles and self-factors or personalities of those learning. Therefore, Hazzard (2016) explains that if the learning strategy is not in accordance with the learning style, students cannot learn the language well. According to Brown (2007), language learning strategies can be grouped into three kinds: cognitive strategies, metacognitive strategies, and socio-affective strategies. The three kinds of strategies have variants in their use in language learning. This depends on the cognitive style and the learner's understanding of the strategy he or she occupies. In line with the diversity of these strategies, this article focuses its discussion on cognitive strategies in reading comprehension.

Gagne (1977, p. 167) explains that cognitive strategy is an internal process known as the learning process of control. Furthermore, Gagne explains that as an internal process, cognitive strategy serves as a way to modify and regulate the learning process. In his explanation, Gagne argues that strategy gives or becomes the basic structure for learning. With this strategy, students try to overcome difficulties or problems faced. The cognitive strategy of the learner always evolves in line with their success in learning. These developments are the development of ways to improve the regularity of the internal processes associated with learning.

Cognitive strategy deals with how to learn, how to remember, and how to convey ideas reflexively and analytically. If the learner masters the internal process well, they will be able to self-learn (self-instruction) and can learn independently. They will be able to solve problems and convey ideas well. Gagne and Briggs (1979, p. 71) explain that cognitive strategy is an internally organized skill that affects the intellectual process of the learner, which includes the process of understanding problems, learning, remembering, and thinking. The statement implies that cognitive strategies are internal processes that can be utilized for various activities requiring cognitive involvement, including (1) cognitive strategies in reading comprehension, (2) cognitive strategies in learning, (3) cognitive strategies in recall, and (4) cognitive strategies in thinking or solving problems.

The results of Rothkopf and Bisbicos' research cited by Gagne (1977) show that by utilizing cognitive strategies, readers are able to control their attention in understanding a text. Furthermore, Block (1986) explains that in understanding a text, cognitive strategy refers to how the reader seeks to understand what they read, how to make the reading meaningful, and what to do if they encounter difficulties or problems. This strategy in practice can support or assist the reader in understanding the texts they read, may also impede or undermine the understanding of the text (Cohen 1986, p. 133).

The study discussed here aims to describe the cognitive strategies used by students in understanding Indonesian texts and explain the contribution of these strategies to the students' comprehension outcomes. This information is important and needs to be understood by the teacher in teaching reading. Block (1986, p. 463) states that understanding the internal process is very important. Such understanding can assist teachers in designing learning reading comprehension based on reality. In addition, this information also provides an overview of the appropriate form of approach used in implementing teaching reading. Therefore, the study of reading comprehension strategies contributes significantly to the learning process, especially as a reference in determining the form of teaching and learning strategies, organizing lesson materials, developing assessment instruments in reading teaching, particularly with regard to reading comprehension.

## **Research Methods**

### **Research Design**

This research was designed by using quantitative descriptive methods. The study described two variables, namely the accuracy of the use of cognitive strategies in understanding Indonesian texts and the comprehension of the text. To know the relationship between the use of cognitive strategy of understanding the text and the achievement of their understanding, the two variables were correlated. Furthermore, to know the contribution of cognitive strategy to the achievement of understanding, the two variables were analyzed by using regression.

### **Participants**

The participants were 97 students of the Indonesian Language and Literature Department, State University of Malang. All of them had passed the reading course.

### **Research Instruments**

The instruments used in this study were a questionnaire and a reading comprehension test. The questionnaire instrument was used to collect data on the use of cognitive strategies in understanding Indonesian texts, while instruments in the form of reading comprehension tests were used to collect data on reading achievement.

### **Research Data**

There were two kinds of research data, namely scores of students in reading comprehension and cognitive strategies of Indonesian text comprehension.

### **Data Collection**

Data was collected using a cloze test technique and a retrospective verbal report. The cloze test technique is used to collect data about the cognitive strategies of reading comprehension and data about the score of the text understanding. After completing the cloze test, the student is asked to give a report of the things they have done in understanding the text he reads. This verbal report is done by filling in a list of questions in the form of Linkert scale.

## Data Analysis Technique

Analysis of data on the use of cognitive strategies in understanding Indonesian text with the achievement of understanding the text is done by using statistical techniques. Because the data about the use of cognitive strategy of understanding the Indonesian text and data about the achievement of reading is addressed as interval data, the statistical technique used to test the relationship between the two variables is the Product Moment correlation technique. This correlation technique is used to test the relationship between the uses of each strategy with the achievement of comprehension.

## Research Findings and Discussions

### Student Ability in Understanding Indonesian Text

In measuring the ability of students in understanding the text of reading, the research used a cloze test instrument. By using these instruments, students' ability to understand reading texts can be grouped as follows in Table 1.

Table 1: Student Ability in Understanding Indonesian Text.

No.	Score	Categories	Samples	Percentage
1.	85—100	A	12	12,37%
2.	75—84	B	16	16,50%
3.	60—74	C	59	60,82%
4.	50—59	D	10	10,31%
5.	<50	E	0	0%
Total			97	100%

As can be seen from the table, 12 students score A (12.37%), 16 score B (16.50%), 59 score C (60.82%), and those scoring D total 10 (10.31%).

The diversity and value differences obtained by the students illustrate that students' characteristics and competencies are different in understanding the text. These characteristics and competencies have an important role in reading comprehension. Coiro and Dobler (2007) reveal that readers who have had a lot of reading experience will use a set of strategies in reading comprehension. These strategies include previewing the text, setting goals, making predictions, monitoring understanding, questioning, and interpreting text (Duke & Pearson, 2002; Pressley, 2000). Readers skilled in reading comprehension try to improve their understanding by utilizing and linking points of reading content with the experience they have.

Wolff (1987, p. 309) explains that understanding is a cognitive process for obtaining information. The information obtained by the reader is encoded in its own way, which is then further processed at the cognitive level. Thus, the cognitive process of understanding is related to two things: (1) the process of perception, namely the selection and encoding of the perceived stimulus, and (2) the process of conception and proportionalization, namely the understanding of concepts and propositions contained in the text.

In addition to the reader's self-factor, success in reading comprehension is also determined by the variety of texts being read. Various expository texts have different structures and

meanings compared with various narrative texts. These differences require that the reader applies different processes and strategies in understanding them. The results of a study conducted by Biancarosa and Snow (2004) shows that children and adults understand narrative texts more easily than expository texts. In understanding expository text, the reader is required to define a specific task, search for information, select the resources themselves, and synthesize the intertextually important content of multiple sources (Dreher, 2002).

Another aspect that may affect the understanding of outcomes while reading text is the test instrument factor that is used. In this study, students' reading comprehension skills were measured using a cloze test. Assessment of students' ability is more emphasized on the ability to produce and or understand information naturally because the cloze test is a form of pragmatic test (Oller, 1979, p. 39 and Djiwandono, 1986, p. 30). Pragmatic tests have a similarity with communicative tests, both of which emphasize the ability of students to communicate with the language in certain situations (Valette, 1977, p. 12).

In the cloze technique, the blank spaces are deliberately provided in a text by removing certain parts. The student's job in the test is to fill in the empty space with the right words. To be able to fill the vacant place the students are required to master the grammatical system of language and text content read in an integrated manner.

Cohen (1980, p. 96) explains that cloze tests can be used to test the ability to read comprehension globally. In doing this cloze test, the reader is engaging in a constructive process (Nurgiyantoro, 1988, p. 170). The cloze test has a high accuracy rate in measuring the ability to read for comprehension. This is evidenced by the results of the Bensousan study (cited by Djiwandono 1986, pp. 67–68), which suggests that cloze tests have a higher average power difference and appear to be an effective alternative in reading comprehension test. In line with that opinion, Almeida (cited by Chall, 1984, p. 239) explains that the accuracy of 40% of cloze test values is proportional to the accuracy of 75% of reading scores on the comprehension of multiple-choice forms.

The reliability and validity of the cloze test here in English has been widely studied. Ginting (1990, p. 44) cites the results of a Bachman study, which show that the cloze test has a high reliability coefficient. From some of the studies put forward by Bachman it proves that the cloze reliability coefficient ranges from 0.608 to 0.880. In addition, Bachman examined the correlation of cloze tests with standard English tests to check the validity. The correlation results show that the cloze test has a high correlation coefficient with the standard English text. The coefficients obtained from the operation are 0.848 and 0.830 with the TOEFL Total, 0.818 and 0.803 with TOEFL Reading, and 0.820 and 0.812 with TOEFL Structure.

Based on the discussion of the above research findings, it can be concluded that the students' reading comprehension score is determined by several factors. These factors include student self-factor, variation of text read, and test instrument factors used. Student self-factors include background knowledge, learning styles, and understanding strategies used in reading. The variation factor of the text is the level of language difficulty and the text content read, while the test instrument factor is related to the accuracy of the tool in measuring the competence that should be measured.

Students' understanding of reading text can be improved. In the process of reading learning, teachers need to select reading materials that are liked by students. Ibrahim (2016) suggests that in order to develop students' reading skills, teachers need to provide reading material

avored by students. In addition to the choice of reading material, to improve students' understanding, teachers can apply multi modal in learning.

### **Cognitive Strategy Applied Student in Understanding Indonesian Text**

From the results of data analysis, it can be seen that students have different strategies in understanding reading text. Of the 97 participants, 13.4% of students implemented a technical-aid moves strategy in understanding the text. This strategy is applied by using keyword help, rereading the text portion of the text, highlighting the important words, skipping the difficult part, reading through the text, numbering the propositions or statements that are important, and making notes. Students who apply the coherence-detecting strategy in understanding the text number 52.6%. With this, the strategies used include integrating information in the text, anticipating text content, imagining text content, recognizing text structure, and interpreting textual content. 34% of students apply a simplification and clarification moves strategy in understanding text. This is done by using an association technique, with paraphrasing, word decoding, taking an overview, and questioning.

The results of this study are in line with the findings of research conducted by Block (1986), which is research on understanding strategies used by readers in a second language. The results show that readers use a variety of strategies to understand the text. In line with the results of the study, Cohen's (1986) study shows that readers use various strategies in understanding the text, especially in answering the comprehension questions about reading content. On the other hand, there are studies that try to link ESL students' perceptions of the cognitive strategies they use in understanding the text with the understanding achievement of the text (Padron and Waxman, 1988). The results of this study indicate that students' perceptions of the strategies used vary widely. From the diversity of perceptions there are those who have a positive relationship; others have a negative relationship with the achievement of understanding achieved by the students.

The cognitive strategies used by the reader in understanding the text vary. Block (1986), citing the explanation of Hosenfeld, divides the strategy into two: the strategy of understanding the basic meaning of the line (main meaning line) and word-solving strategies (word-solving strategies). Meanwhile, Olshavsky shares an understanding strategy in clause related and related words. Based on his research findings, Block classifies the strategy in two broad categories: general strategies and local strategies. General strategies include anticipating content, recognizing text structure, interpreting the text, using general knowledge and association to (a) explain, extend, and reinforce content understanding, (b) evaluate the accuracy of the content, and (c) respond to content, comment on behavior or process, monitor comprehension, correct behavior, and react to the text. Local strategies include paraphrasing, rereading, questioning meaning of clause or sentence, questioning meaning of a word, solving vocabulary problems.

Padron and Waxman (1988) divide the cognitive strategy of textual understanding into 14 kinds. The strategy has a positive or negative relationship with student reading achievement. Strategies that have a positive relationship with student achievement are (1) making a written summary, (2) highlighting important parts, (3) raising questions to oneself, (4) checking understanding through text, (5) asking questions – the problems that exist in the text that he does not know, (6) making notes, and (7) describing the text's content in the mind. Conversely, strategies that have a negative relationship with student reading achievement are (1) thinking about other things while reading, (2) writing every word read, (3) skipping parts



of the text that are not understood, (4) reading text as soon as possible, (5) saying or pronouncing every word repeatedly, (6) looking for difficult words into the dictionary, and (7) repeating the main idea.

Based on the results of Padron and Waxman's research, from a number of cognitive strategies studied, it turns out that strategies that are often or mostly used by readers are strategy (a) asking for parts of text that are not understood, (b) checking understanding through text, (c) describing the content of the text in the mind, and (d) searching for difficult words in the dictionary. Less frequent or less used strategies are strategies (a) reading as quickly as possible, (b) reading while thinking of other things, (c) writing every word, and (d) skipping over unknown portions of words. In addition, the standard deviation for each strategy item is very high. This suggests that the responses given by the reader to each of these strategies also vary greatly.

From the results of regression analysis, Padron and Waxman (1988) find that the reader's perception of the strategy used has a contribution to the achievements in the understanding of the text. The two strategies of the seven strategies are thought to be negatively correlated, as evidenced by the results of the study. Strategies of thinking other things while reading and saying key ideas repeatedly make a negative contribution to the comprehension of the text. That is, if both strategies are increasingly used, then the results will be lower.

In addition to the strategies outlined above, there are still a number of other strategies proposed by Sarig cited by Cohen (1986, pp. 134–135). Sarig organizes cognitive strategies in reading comprehension into four types, namely; (1) technical-aid moves, (2) simplification and clarification moves strategies, (3) coherence-detecting moves, and (4) monitoring strategies (monitoring moves). Included in the strategy of using auxiliary techniques is any means or techniques that can be taken to assist the reader in understanding the text he reads. For example, marking the key elements, using dictionaries, skipping over difficult passages, using notes, numbering each proposition, and so on. A simplification and clarification moves strategy is a simplification and explanation strategy, with the intention of making it easier to understand the content of the text being read. These include solving word difficulties using synonyms, simplifying redundant syntax levels, creating paraphrases, and so on.

Including strategies for detecting coherence is a strategy of identifying text frameworks in general, identifying key information strategies, production strategies, development ideas, and so forth. The monitoring strategy is a strategy to monitor weaknesses and strengths in relation to textual understanding. Included in this latter strategy are strategies for identifying misconceptions about reading material, deliberate change of performance strategies, error-justifying strategies, and so on. Sarig identifies this strategy based on his research results of 10 people reading English as a foreign language text.

Nevo, as cited by Cohen (1986), lists 16 kinds of strategies used by readers in understanding the text, especially in answering the questions of reading content in the form of multiple choice. The strategies are to use a background of knowledge, guessing, rereading the text, using chronological order, utilizing key sections in the text, stopping at the right choice, using the elimination process, choosing exceptions, using short-length options, localizing, using general words, utilizing key words, choosing answers to existing questions of words contained in questions, associating, viewing statements and matching with text, and other strategies.

## Contribution of Cognitive Strategies to Indonesian Text Comprehension

### Hypothesis 1

The first hypothesis of this study is: “There is a significant correlation between the use of technical-aid moves strategies in Indonesian text comprehension with student scores in textual comprehension”. The results of research that can be used as a basis to reject or accept the hypothesis can be seen from the statistical analysis results in Table 2.

Table 2: First hypothesis.

The correlation coefficient ( $r_{xy}$ )	- 0,660
Trust Confidence level	0,05
Degree of freedom (d.f.)	97
Critical value ( $r_k$ )	0,195
Conclusion	Negative relationship

From the table, it can be seen that between the use of technical-aid moves strategies in understanding the text (variable y) correlation coefficient of -0.660 was obtained. In degrees of freedom or sample number 97 with a level of 5% confidence obtained critic value ( $r_k$ ) of 0.195. So it can be concluded that the null hypothesis is rejected or the alternative hypothesis is accepted. This means that there is a negative contribution of the use of technical-aid moves strategies in comprehension of Indonesian text to the result of the text comprehension.

### Hypothesis 2

The second hypothesis of this study is: “There is a significant relationship between the use of coherence-detecting moves strategy in comprehension of Indonesian text with student scores in text comprehension”. The results of research that can be used as a basis to reject and accept this hypothesis can be seen from the statistical analysis results in Table 3.

Table 3: Second hypothesis.

The correlation coefficient ( $r_{xy}$ )	0,094
Confidence level	0,05
Degree of freedom (d.f.)	97
Critical value ( $r_k$ )	0,195
Conclusion	Positive relationship

From the table above, it can be concluded that the relationship between the use of coherence-detecting moves strategy in understanding the text (variable x) with the achievement of understanding Indonesian text (variable y) found correlation coefficient of 0.094. In degrees of freedom (d.f.) 97 and 5% confidence level the critical value ( $r_k$ ) of 0.195 was obtained. So it can be concluded that the hypothesis is accepted. This means that the use of coherence-detecting moves strategy in comprehension of Indonesian text has contribution to the achievement of comprehension of Indonesian text.

### Hypothesis 3

The third hypothesis of this study is: “There is a significant relationship between the use of simplification and clarification moves strategies in comprehension of the Indonesian text with the score of students in comprehension of a text they read”. The results of research that can be used as a basis to reject and accept this hypothesis can be seen from the statistical analysis results in Table 4.

Table 4: Third hypothesis.

The correlation coefficient ( $r_{xy}$ )	- 0,620
Confidence level	0,05
Degree of freedom (d.f.)	97
Critical value ( $r_k$ )	0,195
Conclusion	Negative relationship

From the table above, it can be seen that the relationship between the use of simplification and clarification moves strategy in understanding the text (variable x) with the achievement of understanding Indonesian text (variable y) was obtained by the correlation coefficient of -0.620. In degrees of freedom (d.f.) 97 and 5% confidence level critical value ( $r_k$ ) was 0.195. So it can be concluded that the hypothesis is rejected. This means that between the use of simplification and clarification moves strategies in comprehension of the Indonesian text with the achievement of understanding Indonesian text has a negative relationship.

Based on the results of data analysis, it can be concluded that the use of technical-aid moves strategies and strategies of simplicity and clarification have a negative contribution to text comprehension scores. This is theoretically explained by Coiro and Dobler's (2007) statement, who contend that the text factor is an important factor to consider in reading comprehension because it determines the strategy that the reader must undertake in reaching comprehension. The reader in choosing a text comprehension strategy should consider the purpose of reading and the textual nature of the text they are reading. The choice of inappropriate strategies may impede the comprehension of the text (Cohen, 1986). From the explanation, it can be concluded that the selection of the technical-aid moves strategy and the simplification and clarification moves strategy is not appropriate to understand Indonesian text formatted in the form of cloze test. The choice of strategy does not match the purpose of reading and the characteristics of the text being read.

Technical strategies are very useful for those who are learning to read or for unskilled readers. In addition, these strategies are better suited to assist in understanding the text with a very high degree of difficulty. However, for advanced readers, those strategies will inhibit comprehension. If the difficulty level is not high, the use of these strategies will be less efficient. With such strategies, these readers spend much of their time focusing on comprehension of the information in the text.

The strategy of simplification and clarification moves uses general knowledge and association. This strategy can improve the reader's comprehension if the information conveyed in the text matches the general knowledge of the reader. However, if such general knowledge is inconsistent with the reading information, the use of such general knowledge may lead to the misinterpretation of the content of the reading. In reading, a reader needs to draw upon the same background knowledge as the information expressed in the text. The background of the reader's knowledge of the contents of the text is called schemata.

Rumelhart (1977) explains that readers use schemata to find the meaning of the text they read. Schemata is a structure of knowledge that represents concepts in the mind of the reader and is used to understand the text they read. From here it can be concluded that to understand the text, readers require schemata about the text.

In light of the negative contribution of the findings of this study, we need to pay attention to the explanation of Paris et al. (cited by Coiro & Dobler, 2007), which states that in the context of reading comprehension, metacognition involves awareness and the use of self-evaluation and regulatory strategies. A good self-evaluation and regulatory strategy can improve text understanding, while poor evaluation and regulation lead to a low understanding of the text. From these statements, it can be concluded that the negative contribution of the use of comprehension strategies and comprehension results may be due to low awareness and self-regulation in applying appropriate text understanding strategies resulting in low comprehension results.

In understanding the text, the skilled reader will attempt to adopt and use other alternative strategies to understand the text they have read. This is done when the reader faces problems in finding and utilizing the information in the text. However, less skilled readers cannot naturally monitor the use of effective strategies and cannot choose other alternative strategies when faced with difficulty in reading comprehension (Paris et al., 1983). Based on these statements, it can be concluded that the negative contribution of understanding strategies to the results of understanding indicates that the strategy used by the reader is not an appropriate strategy choice for understanding the text as measured by using the cloze test.

The use of coherence-detecting moves strategies has a positive contribution to textual comprehension. The coherence-detecting moves strategy includes (1) integrating the information contained in the text, (2) anticipating the text content, (3) describing the text content in the mind, (4) recognizing the text structure, and (5) interpreting the text content. Such strategies in the comprehension of texts are necessary. In reading, the reader is required to be able to combine the information contained in the text, so as to obtain complete information from the text. In addition, to gain a comprehension of the text content, the reader should be able to anticipate the contents or parts of text that will be read. By anticipating these or parts of the text, the reader will gain clearer information about the content of the text they read.

### **Conclusion**

The results of this study conclude that in comprehension of the Indonesian text, students use various cognitive strategies. The diversity of the use of such strategies is due to the self-factor and student experiences in reading, and the characteristics of the text being read. As readers who have a lot of experience, students are able to choose strategies that match the characteristics of the text she/he reads. However, students who are less skilled and less experienced in reading have difficulty in choosing strategies that match the variety of texts they read. This is what causes the diversity of achievements of varying comprehension results. Skilled students who are able to choose the right comprehension strategy get a high comprehension score, while those who are less skilled get a low comprehension score. Therefore, the results of statistical analysis show that the contribution of the use of textual comprehension strategy there is a positive correlation and some are negatively correlated to the scores achieved by students in understanding the text.

The findings of this study have important benefits for language teaching, especially for reading comprehension learning. The findings of research in the form of variations of strategies used by students in comprehension of an Indonesian text can be used as a basis and reference for language teachers to trace these strategies in understanding the text. In addition, in teaching of reading comprehension skills, reading text factors that are used as reading material need to be selected that match the self and condition of the learner because these factors have a significant contribution in improving the comprehension of the reader.

The findings of this study also have important benefits for future researchers, namely as a source of reference in assessing similar topics. To reinforce the findings of this study, researchers can further study research on the same topic, but use different types of reading texts, such as narrative text or persuasion texts. In addition, to complement the range of strategies in language learning, the next researcher can research topics on metacognitive strategies or socio-affective strategies in textual comprehension. With the study of similar topics, theoretical-empirical findings about Indonesian language learning strategies, especially Indonesian language text comprehension strategies can be accumulated more fully.

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