

## Exploring The Effect of Memory Strategies On Students' Grammar Skills: Indonesian Learner Context

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### Abstract

One of the major problems faced by Indonesian young learners when learning English grammar is being difficult to memorize sentence pattern with present tense. Grouping with vertical and horizontal lines were believed as an effective memory strategy to memorize the sentence pattern. Therefore, this study targeted to explore whether or not the use of memory strategy was applicable for students when constructing sentences. The research used quasi-experimental design. Each of the classes consisted of 10 participants chosen through total purposive sampling technique. Statistical technique using SPSS program was applied to confirm the hypotheisis. Based on the test of normality, it was found that the probability value of 0.134 is greater than the significance level of 0.05. This indicated that the data were in a normal distribution. Therefore, test of significance was done through parametric test and it showed that the significance value of 0.025 was equal to the probability level of 0.025, which means that there is no significant difference between experimental and control groups' ability. In conclusion, the use of vertical and horizontal lines were not more effective in improving the students' grammar skills than the conventional strategy. However, the strategy can be further developed and applied in teaching students with intermediate level.

**Keywords:** *grammar, memory strategy, grouping, sentence*

### INTRODUCTION

This paper primarily investigated two major variables consisting of students' grammar skills as dependent variable and memory strategy used to memorize grammar rules of simple English sentences as independent variable. According to Swan (1984), grammar is the rules that say how words are combined, arranged and changed to show different meanings. From this definition, it can

be inferred that the rules of grammar may affect the meaning of sentences. Consequently, people who use a language, English in particular, must carefully apply rules of grammar in order to avoid miscommunication among speakers, if not, communication may fail, as Harmer (2001) states that if grammar rules are too carelessly violated, communication may suffer. Therefore, it is necessary for language learners to understand grammar in order to make sentences grammatically, and communicate ideas successfully. Bawantara in Safitri (2021) revealed that learners are unable to express their ideas accurately if they are lacking knowledge of grammar.

In Indonesia, based on the 2013 curriculum, grammar is taught implicitly and integratedly with the four skills of English because the curriculum prevailing implements communicative approach. In this case, grammar is taught with the concept of communicative language teaching which provides students opportunity to express their ideas grammatically (Sarosa, 2016). However, the learning process does not seem effective to enhance the students' ability to communicate their ideas grammatically. The assumption was proved by the previous research findings showing problems or errors still committed by EFL learners. Floranti, A. D., & Adiantika, H. N (2019) found out that learners made some kinds of errors in the area of verbs when writing sentences, and most of the errors were misformation and omission errors. Furthermore, it was also exposed that the dominant errors found were selection, and learners mostly made errors in the area of word forms, followed by articles, nonfinite verbs, verb tenses, plurals, and prepositions (Mustafa, F., Kirana, M., & Bahri, S, 2017).

The research findings were in line with the pre-observation results found in SMP Muhammadiyah Bulukumba. Based on the pre-test results, some students still violated grammar rules when writing using simple English sentences with present tense. In fact, the verb form used as predicate was not suitable with the noun or pronoun used as subject in the sentences. Also, the students made spelling errors by omitting some alphabets. Such errors certainly may obstruct students' way to develop their communication skills either orally or in written form. In relation to the fact found, it can be assumed that the students have problems in memorizing and understanding grammar rules of simple English sentence, especially the agreement between noun as subject and verb as predicate in expressing ideas of habitual actions.

This is hardly shocking since the rules of making English sentences are complex and quite complicated. Nia in Laili, Isna (2019) cited that many EFL learners believe that learning grammar is hard and it is a complex, monotonous, and boring task. There are some factors that cause difficulties in remembering the rules. Brown in Damaiyanti and Damaiyanti, n.d, (2021) specified two sources of errors or difficulties in language. First, interlingual factor is a significant factor which causes problems resulting from language interference or negative transfer. In this case, students often find difficulties to remember grammar rules of English sentences due to learners' native language. For instance, in Indonesian, the verb form of sentences is not influenced by tense and subjects, while in English most of the verb forms change based on the tense and subjects, especially when expressing ideas of habitual action. The sentence structure of learners' native language can cause problems when memorizing the rules of English sentences. Consequently, the learners can possibly make grammatical errors because they compare two different languages at the same time. Second, intralingual factor is a major factor that comes from how students learn grammar. In the classroom, students learn from teachers' explanation and their friends. Likewise, students may learn grammar autonomously from various references such as books, e-books, learning management systems, sosial media, and so forth. During the process, they probably create

erroneous assumptions about the sentence structure.

In order to anticipate the obstacles that might hamper students' way to memorize grammar rules of English sentences, there was a need for students to apply strategy. By considering the problems, the interlingual and intralingual factors, the writer come up with a solution which was believed to be an effective way to improve the students' grammar skills. The strategy is called 'memory strategy'. In this study, the memory strategy applied was mental linkage by grouping simple sentences with vertical and horizontal lines based on the sentence form and predicate which agrees with the subject. Simple sentences being studied was simple declarative sentence with present tense which is divided into positive and negative form by using vertical line, and then the sentences are divided again into plural and singular subjects with horizontal line. The use of the lines was expected to help students memorize the sentence structure more easily.

Some studies have been conducted and have also proved the effectiveness of memory strategies. Faisal and Atei (2022) carried out a study on the influence of using memory strategies to improve students' grammar skills. The findings demonstrated that the experimental group's retention improved statistically. However, several problems have been identified with the research. First, the memory strategies studied were not limited. Second, the instrument used, questionnaire, was not relevant to what was assessed. Third, some research questions were formulated but there was only one instrument. Therefore, it is important to reduplicate the research which specifically aimed at finding out whether the use of memory strategy was effective to improve the students' grammar skills. Furthermore, in order to find data more objectively, this study restricted the memory strategy and merely focused on one kind of memory strategy, the research instrument used cognitive test which was relevant to the research question and the hypothesis being tested.

Also, some studies also examined the effect of memory strategies but on students' vocabulary retention. The research result shows that the learners' vocabulary retention statistically improved after learning with memory strategies (Abbassi, Hassaskhah, and Tahriri, 2018). With the same research focus, Santacruz and M. Ortega (2018) also found out that most students in the experimental group treated with a series of memory strategies gradually showed progress on their retention and retrieval of words. Based on the previous research results, it can be presumed that memory strategy can also be effective in improving the students' retention of sentences pattern. The previous research was obviously inspiring the researcher to conduct a research by examining the effect of memory strategy on the students' grammar skills, with different treatment, samples and locatin.

### **The Concept of Memory Strategy in Language Teaching**

Memory strategies are techniques that assist learners store information and retrieve when needed" (Oxford, 1990, p. 38). There are four kinds of memory strategies; Memory strategies are classified into direct and indirect techniques. Direct strategies without delay contain with the goal language and require intellectual processing of the language. It is composed of 'memory', 'cognitive' and 'compensation' techniques. Similarly, 'indirect strategies' are strategies which might be circuitously worried in mastering. In other words, those strategies assist and manipulate language mastering without delay related to the goal language hence, they underpin the language mastering process and include 'metacognitive', 'affective' and 'social' techniques. A study about the effect of Memory Strategy Training on vocabulary learning was conducted. Alzaidi (2018) shows that the use of memory strategies are effective in improving students' ability to recall the meaning of words

and spelling when needed. In comparison with the previous research, the memory strategy were used to improve the students' grammar skills.

### **Grouping with Vertical and Horizontal Line**

The strategy to be applied in this study is direct strategy by creating mental linkage. One of the ways to create mental linkage is grouping. Grouping refers to classifying language into significant context to make it easy to recall via way of means of decreasing the range of discrete elements (Oxford in Nemati, 2010). In this case, learners will group the sentences using vertical and horizontal line based on the subject used. The lines are made up based on the factors that affects on the students' retention; one of them is orderliness. According to Dardjowidjojo (2010), "entitas yang ditata secara teratur akan lebih mudah di ingat daripada secara acak." The assumption says that things that are well ordered will be more easily scrambled The lines classify the English grammar rules of simple sentences based on the noun and verb features used in a simple positive and negative sentences, so that the learners can directly recognize, differentiate as well as recall the sentence patterns when needed. In order to strength the students' memory, the teachers will ask the students to apply rehearsal strategy. According to Weinstein and Mayer in Dembo (1994; 329), rehearsal strategy involves repetition activities by either speaking or writing the materials. This rehearsal strategy is in line with the memory strategies cited by Dardjowidjojo (2010; 275) assuming that "makin sering suatu peristiwa diulang, makin besar kemungkinannya peristiwa tersebut akan diingat." Based this assumption, it can be concluded that the more often the events are repeated, the more possible the events are memorized.

In relation to the research background, object of the research, review of relevant literature, assumptions and referring the previous related research findings, it can be hypothesised that memory strategy can be used to help students memorize English sentences pattern and write sentences grammatically. Therefore, it was important to conduct a research which specifically aimed at finding out whether the use of memory strategy was effective to improve the students' grammar skills under quantitative paradigm with experimental method. The research must be conducted to help students solve their problems in making grammatical sentences.

## **METHOD**

### **Design of the Research**

It is very important to apply a research method in conducting a study because it leads the researcher to acquire a truth objectively. Since the research objective was to know whether or not the use of memory strategy was effective to help students memorize and understanding grammar rules, the research was conducted under experimental research. The experimental research is a research which tests hypotheses to establish cause-effect relationship (Gay, 2006). To establish the relationship, one of the quasi-experimental designs was used. It is the nonequivalent control group design, which randomizes intact groups, not individuals (Gay, 2006; 258). The research were carried out at MTs Muhammadiyah Bulukumba, South Sulawesi, and were undertaken in academic year 2021/2022 on February until Mey.

### **Population and Sample of the Research**

Population is the group to which she or he would like the results of the study to be generalizable. The defined population has characteristics that differentiates it from other groups

(L. R. Gay, 1981:86). By considering accesibility, the researcher chose the students of MTs Muhammadiyah Bulukumba in the academic year 2021/2022 as the population of this research, especially grade VII. The seventh graders were selected for the students had already possessed prior knowledge of English basic vocabulary needed in constructing sentences, which could make them more easily memorize the sentence pattern with memory strategy, and based on the research design, there were two classes that were chosen non randomly. The classes were grade VII.A and grade VII.B.

**Instrument of the Research**

To collect the data regarding the students’ grammar skills, a language test was developed. The language test developed was a kind of grammar test consisting of some incomplete sentences. In this case, the students were asked to complete the sentences with the right verb forms in one hour. Such test was built because it was thought to be appropriate with the students’ level. The test was distributed before giving treatment in order to know the students’ prior knowledge, and also after the treatment with memory strategies was carried out to find out the effectiveness of the memory strategy in improving the students’ grammar skills.

**Procedures of the Research**

After distributing pre-test, the expereimental group learnt grammar by creating mental linkage. The creating mental linkage was used to memorize sentence pattern. Based on the learning objective to be reached, the students had some learning expereinces; 1) the students read a text aloud, 2) the students identified simple sentences, 3) the students put the sentences on the lines, 4) the students drew conclusion about the sentence pattern, 5) the students drilled the sentences and 6) the students did exercises. Otherwise, the control group was treated with conventional strategy.

**Data Analysis Technique**

To confirm the hypothesis that was formulated as well as achieve the research objective, the data with regard to the students’ grammar skills were analyzed with statistic method. The statistic methods consists of some stages: (1) Scoring the students’ answer; (2) Calculating the students’ final score; (3) Tabulating the students’ scores, (4) Calculating the mean score and standar deviation, and test of significance using SPSS program.

**FINDINGS AND DISCUSSIONS**

The major purpose of this study was to determine the effect of memory strategy on students’ grammar skills. The results of this study can be seen from statistical data that show the mean score, and the test of significance results as seen in the following table.

**Table 1.** Group Statistics

Group Statistics				
Class	N	Mean	Std. Deviation	Std. Error Mean



NILAI	EXPERIMEN	10	62.9730	17.15557	5.42507
	CONTROL	10	45.1600	15.37474	4.86192

Based on the statistical data above, it can be postulated that the mean score of the experimental group which was treated with memory strategy is 62.97. The mean score is greater than the mean score of control group taught with conventional strategy. The score certainly proves that memory strategy can help students memorize sentence pattern. This statistical data supports some previous related research findings focusing on the effect of memory strategy. However, the test of significance result suggests that using memory strategy did not significantly contribute to assist students in memorizing sentence structure of simple English sentences, when compared to the conventional strategy applied in control group. The assumption is based on the statistical analysis results that can be seen in the following table;

**Table 2.** Independent Sample Test

Independent Samples Test					
t-test for Equality of Means					
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower
NILA I	Equal variances assumed	.025	17.81300	7.28489	2.50801
	Equal variances not assumed	.025	17.81300	7.28489	2.49493

There are some explanations for the results found in this study. In relation to the treatment process, it can be reported that at the first meeting the students learnt the sentence pattern quite enthusiastically. The students took part in a game at the opening section, and some students raised their hands when asked questions and did some other instructions. They also productively made simple sentences with plural noun as subject and verbs as predicate without affixes in positive form by using vocabulary they had already memorized. At the second meeting, the students still learnt sentence structure with plural subject but in negative form. In this case, the students, first, made vertical and horizontal lines.

After that, they formulated positive sentences on the first box and then changed it into negative forms using ‘does not’ based on the example given on the next box. They also played games in order to attract their attention and reduce their nervousness, as "Games can lower

anxiety, thus making the acquisition of input more likely" (Richard-Amato; 1988). However, some students were absent. As a consequence, the class was monotonous and less interactive, which led the students to depressed mood and loss of motivation. This also becomes one of the major causes of the ineffectiveness of memory strategy. Wen & Piao, 2020 cited that the constructive communication of learning process reinforces motivation and stimulates participants to respond to their surrounding challenges. Thus, without interaction and motivation, students will not reply the instructions.

### **Discussion**

At the third meetings, the students learnt sentence structure with singular subject in positive and negative forms. They learnt how to attach verbs with suffix -s in positive sentence and used 'does not' in negative sentence. They also grouped the sentences with vertical and horizontal lines, and drew conclusions. At the fourth and fifth meetings, the students still learnt sentence structure with singular subject in positive and negative forms but with suffix -es, and the activities were almost the same as the previous meeting. Although the learning process seemed to have matched with the lesson plans which aimed at improving the students' ability to construct sentences grammatically, some problems were still found during the process in the classroom. First, the condition of class physically did not support the learning process. The class where the study was conducted was small in size, and the walls looked quite dirty. Thus, the learning process was not interesting and less encouraging. Besides, the facilities such as white board and benches were inadequate. Also, there was no electricity power in the classroom, so the researcher could not use media such as liquid crystal display (LCD). As a result, the researcher should write examples of sentences on the white board, and unfortunately the students looked unmotivated to learn. This research result was in accordance with a study conducted by Olufunke Akomolafe, C., & Olubunmi Adesua, D. (2016) which declared that a significant correlation between physical facilities and students' motivation level and academic achievement was identified. Therefore, based on the research results, it is highly recommended that public schools should provide adequate facilities to motivate students.

### **CONCLUSION**

Based on the findings above, it can be concluded that teaching grammar skills to students with grouping using vertical and horizontal line as memory strategy is not simple. There are many things that should be well taken into consideration before giving treatment, particularly other variables that might impede the effectiveness of the strategy applied toward the students' ability. Therefore, it is suggested that those who intend to further study the same variables, they must carefully select schools where to carry out the research and whom to be studied. It can also be assumed that grouping using vertical and horizontal line as memory strategy can be more appropriate for intermediate level students in English because English grammar rules are quite complex. Those with higher level or have pretty understood grammar rules, will categorize and memorize the sentences more easily based on the lines, contrasted to those students with low ability level who still struggle for and find difficulties when learning grammar.

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