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THE EFFECT OF FLY-SWATTER GAME ON THE ELEVENTH GRADE STUDENTS' VOCABULARY MASTERY

by

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Abstract:

In learning English, vocabulary is one aspect of language and is the most important component as a communication tool that students must master as a basis for mastering English. The aim of this research is to examine the effect of using the fly swatter game on students' learning and vocabulary mastery. The sample from this research was eleventh grade students at SMA Negeri 2 Metro, namely class XI IPS 2 (Experiment) and XI IPS 3 (Control). This study used a quantitative method with a quasi experimental design. In this study, the instrument used is a test form, the researcher employs multiple choice to determine the percentage of students' vocabulary mastery. Research data was taken by the researcher giving a pre-test at the beginning and providing different treatment between the two classes. The researcher used the fly swatter game as a teaching technique in the experimental class, while the conventional teaching technique will be used in the controlled class. After that, the researcher gave a final test to determine the effect, namely the post-test. The results of study using hypothesis testing show that the first test uses a significance level of 5% or a significance level of 0.05. sig. (2-tailed), The t-count (1.420) is lower than the t-table (2,000) with a significance of (0.165) > (0.05). Therefore, it can be said that teaching English vocabulary mastery using the Fly Swatter Game is effective but not significant. This research is very helpful regarding the selection of media used in learning, especially vocabulary, which must be appropriate to the level so that the results obtained can be satisfactory.

Keywords: blended learning; speaking ability; Pearson correlation coefficient; vocabulary learning strategies

Abstrak:

Dalam belajar bahasa Inggris, kosakata merupakan salah satu aspek bahasa dan merupakan

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komponen terpenting sebagai alat komunikasi yang harus dikuasai siswa sebagai dasar penguasaan bahasa Inggris. Tujuan dari penelitian ini adalah untuk mengkaji pengaruh penggunaan permainan pemukul lalat terhadap pembelajaran dan penguasaan kosakata siswa. Sampel dari penelitian ini adalah siswa kelas sebelas di SMA Negeri 2 Metro, yaitu kelas XI IPS 2 (Percobaan) dan XI IPS 3 (Kontrol). Penelitian ini menggunakan metode kuantitatif dengan desain eksperimen kuasi. Dalam penelitian ini, instrumen yang digunakan adalah bentuk tes, peneliti menggunakan pilihan ganda untuk mengetahui persentase penguasaan kosakata siswa. Data penelitian diambil oleh peneliti yang memberikan pre-test di awal dan memberikan perlakuan yang berbeda antara kedua kelas tersebut. Peneliti menggunakan permainan pemukul lalat sebagai teknik pengajaran di kelas eksperimen, sedangkan teknik pengajaran konvensional akan digunakan di kelas terkontrol. Setelah itu, peneliti memberikan tes akhir untuk menentukan efeknya, yaitu post-test. Hasil penelitian menggunakan pengujian hipotesis menunjukkan bahwa uji pertama menggunakan tingkat signifikansi 5% atau tingkat signifikansi 0,05. sig. (2-tailed), Hitung-t (1.420) lebih rendah dari tabel-t (2.000) dengan signifikansi (0.165) > (0.05). Oleh karena itu, dapat dikatakan bahwa mengajarkan penguasaan kosakata bahasa Inggris menggunakan Fly Swatter Game efektif tetapi tidak signifikan. Penelitian ini sangat membantu terkait pemilihan media yang digunakan dalam pembelajaran, khususnya kosakata yang harus sesuai dengan jenjang agar hasil yang diperoleh dapat memuaskan

Kata kunci: *blended learning; kemampuan berbicara; Koefisien korelasi Pearson; Strategi Pembelajaran Kosakata*

INTRODUCTION

In foreign language learning, vocabulary means basic knowledge and valuable material in the form of words that students constantly use in learning a particular language. Students have a limited understanding of listening, reading, speaking, and writing. The role of vocabulary in learning a foreign language is inevitable. Rich vocabulary will help students master English and its four primary skills: listening, speaking, reading, and writing (Asyiah, 2017). A scholar said the significance of vocabulary in the pedagogy of a language is paramount and is a necessary component for language learners to progress (Susanto, 2017). Therefore, learning English using media is a solution for mastering vocabulary. Many studies have stated the beneficial impact of learning vocabulary using media. Some scholars state that one of the methods of increasing vocabulary mastery is video games (Sudarmaji & Yusuf, 2021). Some other scholars state provide support, arguing that learning with the Hangman game is an excellent way for children to practice spelling and pronunciation, improve vocabulary, and have fun at the same time and suggesting that game media that are suitable for use in vocabulary learning can improve students' vocabulary mastery (Tanjung et al., 2019). The conclusion is that the Hangman game is a suitable technique for teaching vocabulary, making the learning atmosphere more fun and effective and increasing students' learning motivation.

Vocabulary is a core component of English that is essential in language expertise and

how students learn English. It is essential to help the students be fluent in English and communicate well by using various words they should know to use accurately. It could be confirmed that the use of word clapping games was significantly effective in increasing vocabulary mastery. This assertion is proven and strengthened by descriptive and inferential statistical analysis results and empirical and theoretical theories supporting the research results. It is also suggested that teachers use this game because the Word clap game can help students learn vocabulary faster and better (Tressya et al., 2017).

Unlike adults, young learners understand languages easily. They start making connections and communicating effectively when exposed to a language input for a while. Concerning the educational process, a few questions need to be answered. First, does the traditional teaching method fulfill young students' needs, or does creativity need to be present to help students gain as much information as required? Games are invaluable for practicing the four language skills. They maximize learners' motivation and interaction by finding opportunities to use language in meaningful contexts (Shabaneh, Y. 2019).

Furthermore, it could also increase the student's motivation and activeness. Teaching vocabulary using word clap games can make the students happy and enthusiastic. It is recommended that the students implement a word clap game to enrich their vocabulary based on descriptive and vocabulary mastery. Word clap game is the best way to help the students memorize various numbers of vocabulary in a fun and effective way. This game can be applied everywhere.

English vocabulary is essential for communicating. If we lack vocabulary, it is not easy to communicate in English. The most important thing is that students must acquire English, which involves four language skills: listening, speaking, reading, and writing. However, to master those skills, the students need vocabulary. Ideally, students should master vocabulary well to support four language skills in English: listening, speaking, reading, and writing. The difficulty in expressing their idea becomes a problem that influences the students to learn English.

English vocabulary is essential for communicating. If we lack vocabulary, it is not easy to communicate in English. A scholar revealed several reasons why previous researchers conducted this research. First, students are not interested in learning

vocabulary. Second, the students still lack vocabulary. Sometimes, students feel confused to express something. The last reason is that the teacher always uses boring techniques to teach vocabulary, so the students are not interested in learning English. From the delineation, the researcher has applied games to teach vocabulary. Fun games may create fascinating and new classrooms, but they can also guide learners and teachers to use them efficiently and prepare them for a future where fun games may continue to evolve (Mawarni & Susanto, 2021).

Games can be used as an educational technique for learning English. The games used by the researcher are Scrabble and Bingo Game. Scrabble game has a good effect on increasing students' vocabulary mastery. Scrabble trains the students to concentrate and be careful when arranging letter chips as good words (Rosidi & Faliyanti, 2017).

Teaching young learners is very difficult compared to teaching teenagers or adults because young learners get distracted quickly. Children love to have fun and play, so teachers should choose suitable teaching methods that cater to children's nature. Games are one of the methods that could be used to avoid boredom in the classroom. They have a unique role in teaching foreign languages. Both students and teachers will benefit from including games during class time. Furthermore, teachers may achieve all the educational outcomes by using games, especially when teaching vocabulary.

The lack of knowledge about English greatly influences the interest in learning that grows in students. Additionally, the assumption that English is difficult makes them uninterested in learning it seriously. Some scholars said the completeness of student learning outcomes is influenced by many factors, one related to selecting appropriate learning media. Pictionary Game is an effective way to enrich students' vocabulary. It aims to invite them to learn and play. This is a fun way to review student vocabulary because it can encourage students to build their vocabulary. In short, the researcher expects the Pictionary game to be a learning medium that enriches students' vocabulary effectively (Bakhsh, 2016).

A game is an entertaining, engaging, often challenging activity in which learners play and usually interact with others. Choosing vocabulary and teaching methods are important factors (Rahmawati et al., 2022). They considered the problems students face in

dealing with English vocabulary and thought that the riddle game concept could be a good strategy for teaching vocabulary. Thus, the researcher is interested in researching The effect of riddle game students' on vocabulary mastery. The use of riddle games was effective in improving students' vocabulary skills. The suggestion from this researcher is that when using this learning strategy, researchers must often control students directly from one group to another.

The game in teaching is one of the many ways to make learning more effective and exciting. Games are crucially crucial for English language learners and teachers because they provide enjoyment and relaxation and encourage students to use their language creatively and communicatively. The students like to study using picture crossword puzzles. They can memorize the vocabulary easier, they can answer the test quickly, they like to learn English more after using picture crossword puzzles, and they get new experience in learning English. In addition, picture crossword puzzles can make the students pay attention more and focus on the learning process (Nugroho,2017).

Therefore, researchers researched how to increase vocabulary through creative learning methods using game media so students do not get bored. Researchers chose the fly swatter game because the game is straightforward to play and does not require the internet or other gadgets. This can make it easier for teachers or teaching staff with limited knowledge about online games or schools where the internet is still inadequate because this game only requires a whiteboard, marker paper, and a fly swatter. How to play the game is straightforward but can make the class atmosphere less boring. The researcher certainly hopes this research will be valuable and inspiring, especially for students, teachers, and future researchers who will study the same subject.

In this section, the researcher reviews several journals and previous research, and this helps researchers consider the differences in their research results. The researcher adapted from journals on matters relating to this research. The researcher found previous studies related to supporting this research, as described below:

The first previous research was by Tanjung et al. (2019) from Tapanuli Education Institute entitled "The Effect of Hangman Game on Students' Vocabulary Mastery." This study aims to determine the extent of the application of the hangman game on the

vocabulary skills of eighth-grade students of SMP Negeri 1 Padang Bolak, the extent to which the students' vocabulary skills were before and after using the hangman game, and whether there is a significant effect from the use hangman game on the writing skills of eighth-grade students of SMP Negeri 1 Padang Alternating. The population of this study was all eighth-grade students of SMP Negeri 1 Padang Alternating, consisting of 103 students. The sample of this study was 25 students who were taken using a purposive sampling method. The research method used is the experimental method. The T-test formula calculation is higher than the T-table. The t-test value is 18.4, while the table value is at the level of 5%, which is 2.06. With (df) 27, ($t\text{-test}=18.4 > t\text{-table}= 2.06$), the alternative hypothesis is accepted. The results of this research mean that the hangman game significantly affects the ability vocabulary of eighth-grade students of SMP Negeri 1 Padang Bolak. It can be concluded that using the fly swatter game is more effective than using the lecture or memorization method.

The second previous research was by (Putu Tressya et al., 2017) from Ganesha University Education, entitled "The Effect Of Using Word Clap Game On Vocabulary Mastery." This study investigated whether or not the Word Clap Game significantly affected the vocabulary mastery of the fifth-grade students of SD Negeri 1 Banjar Jawa. The research was true experimental with Post-test Only Control Group Design. The population was the fifth-grade students of SD Negeri 1 Banjar Jawa. Cluster Random Sampling was assigned to select the study sample. The samples were 30 students in grade 5A for the experimental group and 30 students in grade 5B for the control group. The result of the data analysis showed that students in the experimental group performed better than those in the control group. It was proven by the result of the descriptive statistics that the mean score of the experimental group was 89,33 while the mean score of the control group was 84,67. The t-test result also showed that the value of the tobs was more significant than the TCV, where the tobs was 2,586 while the tcv was 1,672. Based on the findings, it was concluded that using word clap games significantly affected the students' vocabulary mastery rather than using conventional teaching.

The third research study by Sari (2017) from Potensi Utama University is entitled "The Effect Of Spelling Bee On Students' Vocabulary Mastery." This study aims to find

The Effect Of Spelling Bee games on Students' Vocabulary Mastery. This research was quantitative, and experimental methods were used. The sample of this study was divided into two classes, each with 30 students. This test was tested by using SPSS 25. The result of this study showed that the data mean score in an experimental class of post-test was 87,17. At the same time, the mean score of the post-test in the control class was 76,33. Based on the criteria of the hypothesis test, if sig. 2-tailed (p) was lower than alpha (α) 0.05. In this research, the two-tailed result was $0.000 < 0.05$, which showed a significant effect of spelling bee game on students' vocabulary mastery. So, it can be concluded that applying the Spelling Bee game can significantly change student achievement in vocabulary mastery.

The fourth research was by (Mulyani, 2020) from Tanjungpura University of Pontianak, entitled "The Effect of Pictionary Game on The Student's Vocabulary Mastery." This study aimed to solve the problem in students' vocabulary mastery, especially on nouns, adjectives, verbs, and adverbs of fifth-grade students SDS Karunia Selakau in the academic year 2021/2022. The total population participating in this study was sixteen students. This study uses a pre-experimental design, and this research investigates whether the use of Pictionary games positively affected student vocabulary. The result is that students can significantly outperform the pre-test results after the Pictionary game is applied. Data was collected using pre-test and post-test, then continued with data analysis using the t-test formula and SPSS 22. The result of the t-test computation was at the significance level of 0.025 with the degree of freedom $14 = 2.50$, and then the t-value was 2.87, which was higher than the t-table (2.50). Therefore, it can be concluded that Pictionary games can help students retain new vocabulary, help associate new information with their environment, and help develop their communication skills. In addition, this technique also helps increase students' interest in vocabulary learning.

The fifth previous research conducted by Rahmawati et al. (2022) from University Pematangsiantar entitled "The effect of riddle game on students' vocabulary mastery" This research was aims to see the effect of riddle game on students' vocabulary mastery at grade ten of SMK Swasta HKBP Pematangsiantar. This research design was quantitative research. The sample of this research was taken from two classes that consisted of 56

students (28 students in the experimental group in class X TBSM1 and 28 students in the control group X TBSM2). The researcher found that the mean of the pre-test in the experimental group was 80,16, and the mean of the pre-test in the control group was 56. The research also found that the t-test was higher than the t-table. It showed from $df:54$ ($28+28-2$) with the table was 1,67 and the significance level 0,05. It showed that the t-test was higher than t-table ($2,08 > 1,67$). Finally, the conclusion was that the riddle game significantly affected the students' vocabulary mastery at grade ten of SMK Swasta HKBP Pematangsiantar.

In the description of previous research, the researcher found that almost all previous studies written above investigated the effect of using games on vocabulary mastery. Of all the similarities between previous research and the research that researchers will carry out, one lies in the variable that will be studied, namely vocabulary mastery. The difference between previous research and the research that researchers will do is the media or games used. Several previous researchers used online media but still examined the same variables.

The researcher used an experimental method, the fly swatter game, as a medium for students' vocabulary mastery skills, which will be carried out at SMA Negeri 2 Metro, especially in class XI. The advantage of this research compared to previous research is the use of games that require students to be active and creative. This research uses simple game media to create a learning atmosphere that is not monotonous or boring. This game creates a fun atmosphere for learning. This team game can provide a unique learning experience for students because apart from learning vocabulary, they also learn to work with their group to be motivated to learn, especially vocabulary mastery.

This research adds to the little literature on vocabulary learning strategies through game media, especially at the eleventh-grade and high-school levels. Thus, it is hoped that it can answer the following questions:

1. Is there any effect to using a game called Fly Swatter in the learning process of vocabulary mastery in class XI students at SMA Negeri 2 Metro?
2. Are there any significant changes before and after using the Fly Swatter game on

vocabulary mastery in class XI students at SMA Negeri 2 Metro?

METHOD

Design

The current study traces *the theory of Sugiyono (2019), in principle, his research aims to measure social and natural phenomena*. According to Moeed et al. (2023), the research design is intended to provide an appropriate framework for a study. Thus, the current study employed Quasi-Experimental Design. The primary objective of the experimental design is to test and determine the impact of the results of the treatment carried out on the final results and organize other influencing factors. The variables of this research are variable X (Independent Variable), namely Fly Swatter Game, and variable Y (Dependent Variable), namely Vocabulary Mastery. In this study, one group was designated as the experimental class, while the other was designated as the control class. Researchers employed the fly swatter game as a teaching technique in the experimental class, while conventional teaching techniques was used in the control class.

Participant

According to an expert (Bhardwaj, 2019), sampling is a procedure that involves selecting a sample from an individual or a large group of people for a particular research purpose. In this research, researchers used cluster random sampling from a population. According to Amin et al. (2023), the population is all members of a group of humans, animals, events, or objects that live together in a planned place to conclude the final results of a study. The population of this study was all class XI students of SMA Negeri 2 Metro which consist of nine classes or equivalent with 347 students. To select the experimental class and control class, the researcher used a random sampling technique, and the class chosen was class XI IPS 2 with a total of 14 male students and 21 female students, a total of 35 students as the experimental class and class XI IPS 3 as many as 15 male students and 20 female students, a total of 35 students as the control class. The sample consisted of 70 students.

Instrument

The researcher employed a **pre-test and a post-test**. Pre-tests and post-tests are formative evaluation types used to assess the progress or development of student learning. A

pre-test is a test given at the beginning of the learning process, whereas a post-test is given at the end of learning. The pre-test and post test consisted of 40 multiple choice questions.

Therefore, the researcher has to make research instruments before conducting the research. In this study, the researcher chose two questions (pre and post) as the basis for this research because it was known that no exceptional learning was carried out for vocabulary learning. Researchers say vocabulary is the initial basis for English, so knowing is very important. Researchers use game media where the game is familiar to students. Apart from that, creating a learning atmosphere that is fun and not boring is something that needs to be done so that students can learn effectively.

The instruments passed through validity and reliability test. According to Maslakci (2020), validity is determined by the meaningful and appropriate interpretation of the data obtained from the measuring instrument because of the analyses. To measure a test with good validity, the researcher analyzed the form of the advanced validity test. Face validity is whether a test appears to be a good measure. So, test items must represent the material being discussed. At first glance, the validity of the material provided is following the material assessment experts (Pérez (2017)). It is to test the validity of an instrument using theoretical concepts and contextual instruments. Using a validated measuring instrument ensures that the findings obtained from the analyses are valid.

In conclusion, a research instrument is used to gather testable data. When administering the instrument to the students, the researcher employs multiple choice to determine the percentage of students' vocabulary mastery.

Data collecting technique

This study used pre-test, treatment, and post-test to collect data from the experimental and control groups. According to Faliyanti et al. (2018), research instrument quality is related to validity, and collecting data quality is linked to the ways used to collect data. Thus, the instrument that has examined its validity and reliability is not fixed yet, and valid and reliable data can be produced when that instrument is used precisely to collect its data.

First, it was a pre-test. Before the researcher treated the experimental and control classes, the researcher had given a pre-test. The pre-test aims to determine the student's initial

conditions before the researcher gives the treatment. Then, before teaching new material, play a fly-swatter game with the previous material. The test was suitable for assessing students' knowledge, skills, feelings, motivation, and intelligence. There are 40 multiple-choice questions that students had to answer. Correct questions get one score, and wrong answers score zero. Then, the score was increased to 100 using an index multiplier of 2.5.

Second, it was treatment. It was to treat students using a fly swatter game according to the material being studied. This treatment was in six meetings in the experimental group, namely class XI IPS 2 students. The researcher explained the material studied and used the fly swatter game as media. The game begins with the researcher preparing several papers that contain vocabulary but are in Indonesian. Next, the researcher wrote vocabulary in English, which was written on the blackboard in random order. Then, the students were divided into four groups, and each student in the front row was allowed to choose the correct vocabulary on the blackboard. Then, one of the other students became the vocabulary clue reader (Indonesian). If the clue has been mentioned, students run towards the blackboard to choose the correct vocabulary by hitting it using the fly swatter given at the start of the game by the researcher. The game continues continuously, with students taking turns choosing the correct vocabulary until they run out of it. This game has the rule that the winner is whoever can first hit the vocabulary on the blackboard using a fly spoon quickly and precisely; that is the winner. Each group individually collected as many points as possible. Meanwhile, in the control class, namely class XI IPS 3, the researcher only explained the material studied to the students, and then the researcher tested it by giving a post-test.

Finally, it was a post-test. The researcher gave the students a post-test after the pre-test and finished the treatment. Give a test about the material being taught with the fly swatter game media with the provisions that which group is quick and precise in choosing answers (by hitting using a fly swatter that the researcher has provided) on the blackboard.

Data analysis technique

Since all dataset are interval, the researcher analyzes them using three tests; **normality, homogeneity and hypothesis testing.**

Normality Test

Based on (Sihaloho, 2023), the data has to be generally distributed in a normality test. This test aims to determine that both groups come from populations with normal distributions. The researcher used the One-Sample Kolmogorov-Smirnov test with SPSS to know the normality. The Kolmogorov-Smirnov normality test is part of the classical assumption test. The normality test aims to determine whether the residual values are normally distributed. A good regression model has residual values that are typically distributed. At this stage, there are two criteria, namely: a). The residual value is usually distributed if the significance value is > 0.05 . b). If the significance value is < 0.05 , then the residual value is not normally distributed.

Homogeneity test

The homogeneity test determines whether the variance between the control and experimental groups is homogeneous or heterogeneous. Homogeneous means that the data for both groups have the same variance (Sihaloho, 2023). The homogeneity test at this stage uses one-way ANOVA. At this stage, there are two criteria, namely: a). If the significance value is > 0.05 , it means homogeneous. b). If the significance value is < 0.05 , it is not homogeneous.

A hypothesis is a temporary statement based on norms related to a phenomenon or research case and will be tested using an appropriate method or statistics. (Yam, J. H., & Taufik, R. 2021).

There are two kinds of hypotheses: (1) Alternative Hypothesis and (2) Null Hypothesis. Based on the researcher's problems, there are two research questions in this study, namely:

1. Does the fly swatter game affect the mastery of English vocabulary for eleven-grade senior high school 2 Metro students?
2. How significant is the use of the fly swatter game on the mastery of English vocabulary for eleven-grade senior high school 2 Metro students?

To get an answer to the questions, the researcher should propose an alternative hypothesis (H_a) and null hypothesis (H_o) as follows:

First Hypothesis

1. Alternative Hypothesis (Ha): The Fly Swatter game affects the mastery of English vocabulary of eleven-grade senior high school students.
2. Null Hypothesis (Ho): There is no effect of using the Fly Swatter game on the mastery of English vocabulary of eleven-grade senior high school students

Second Hypothesis

1. Alternative Hypothesis (Ha): The significance of using the Fly Swatter game in the mastery of English vocabulary of eleven-grade senior high school students is significant.
2. Null Hypothesis (Ho): There is no significance of using the Fly Swatter game to the mastery of English vocabulary of eleven-grade senior high school students relevant vocabulary.

RESULT AND DISCUSSION

Result

The researcher obtained 70 samples out of 347 populations who voluntarily completed the questionnaire. Concerning the first objective of this study, the following research question was posed: Is there any effect of using a game Fly Swatter game in the learning process in vocabulary mastery in class XI students at SMA Negeri 2 Metro? The data description includes the range, minimum score, maximum score, mean score, and standard deviation. A summary of the distribution of pre-test data in the experimental and control groups can be seen in Table 4.1

Table 4.1
Pre-test results for the experimental and control classes in the data description descriptive statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Experimental	35	30	45	75	59.20	7.915
Pre-Test Control	35	27	45	72	59.17	7.041
Valid N (listwise)	35					

Table 4.1 shows that the pre-test was given to the experiment and control groups. The range results for the experiment group were 30, and for the control group, 27. Furthermore, the minimum score in the experiment and control groups is 45. Then, the maximum score in the experiment group was 75, and the control group was 72. The mean

and SD results in the group experiment were 7.915 for the mean and 59.20 for the deviation. In the control group, the mean was 59.17, and the deviation was 7.041. The full results can be seen in the appendix that has been included.

Researchers found differences in students' vocabulary mastery before they were given treatment. The researchers presented graphs. Below is a linear chart of students' average scores in vocabulary mastery.

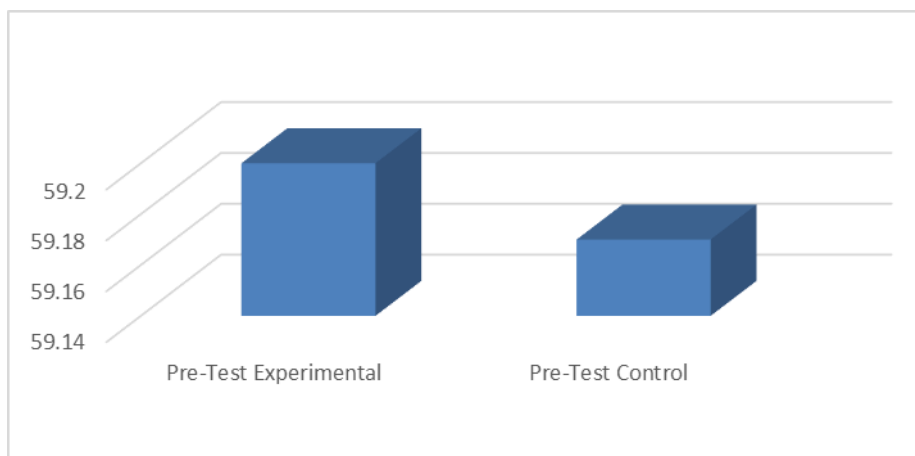


Chart 1. Students' average score in the pre-test

The graph above shows that the pre-test results in the experimental group were higher than those in the control group. However, the difference between the two groups was insignificant, meaning that the experimental and control groups had almost identical pre-test scores.

After knowing the data description, the researcher applied qualitative categories to describe students' vocabulary mastery between the experimental and control groups. These qualitative categories can be high, medium, and low. Student score criteria can be seen in the following table:

Table 4.2

The frequency distribution of pre-test in the experimental class

No	Score	Classification	Frequency	Percentage
1	80-100	High	-	-
2	66-79	Medium	11	40%
3	0-65	Low	24	60%

Source: based on the data analysis

Based on this data, out of 35 students, not a single student was in the high category. Meanwhile, in the medium category, there are 11 students with a percentage of 40%, and in the low category, there are 24 students with a percentage of 60%. Therefore, it can be concluded that the pre-test in the experimental class was in the low category with a percentage of 60%, and the highest percentage was 40%.

In this section, researchers present the distribution of pre-test frequencies in the control group in each category to provide information regarding student pre-test results. The frequency distribution shows the students' scores in each category, while the percentages are in percentage form. For an explanation, see table 4.3 below:

Table 4.3

The frequency distribution of pre-test in the control class

No	Score	Classification	Frequency	Percentage
1	80-100	High	-	-
2	66-79	Medium	9	26%
3	0-65	Low	26	74%

Source: based on the data analysis

Based on the table above, out of 35 students, not a single student was in the high category, so there were nine students, with a percentage of 26%, who got in the medium category. Then, in the low category, there were 26 students with a presentation of 74%. The XI IPS 3 class received the low category with a percentage of 74%.

The table below contains descriptive data from the post-tests of the experimental and control groups. This data can be seen in Table 4.4 below:

Table 4.4

The results of post-test in the experimental and control class in data description

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Post-Test Experimental	35	35	55	90	66.26	7.644
Post-Test Control	35	30	55	85	72.54	8.912
Valid N (listwise)	35					

Based on analyzing the data above, it can be concluded that from a total of 35

students in the experimental and control classes, the range in the experimental class is 35, while the data in the control class is 30. The standard deviation for the experimental class is 7.644, while the control class is 8.912. The experimental and control class has a minimum score of 55. Furthermore, the maximum score in the experimental class is 90, while the maximum score in the control class is 85. To clarify the difference in the average vocabulary mastery in the experimental and control groups after treatment, the researcher presents a linear graph as shown below:

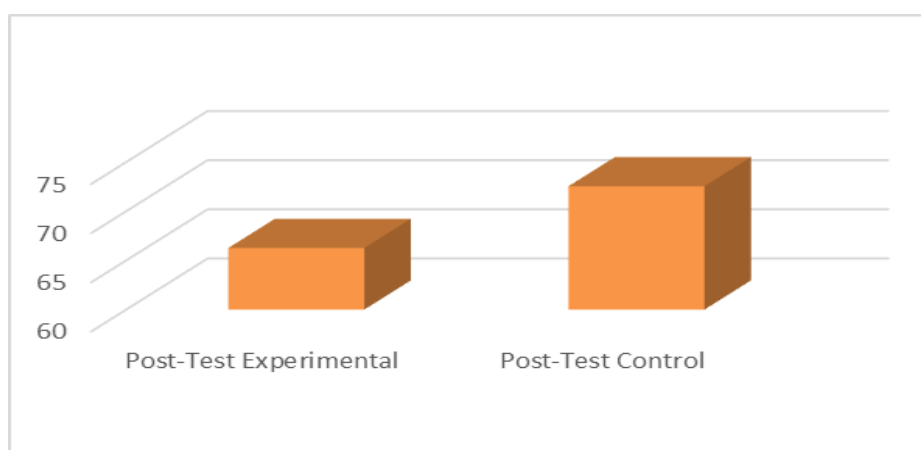


Chart 2. Students' average score in post-test

Based on the linear chart above, it can be concluded that the post-test results of the experimental group were higher than those of the control group. A significant average difference is that the experimental group is better than the control group, as seen in the scores.

Table 4.5
The frequency data distribution of post-test in the experimental class

No	Score	Classification	Frequency	Percentage
1	80-100	High	3	8%
2	66-79	Medium	6	15%
3	0-65	Low	26	77%

Source: based on the data analysis

Table 4.5 explains the specific differences between the data obtained by the control and experimental classes and the effect of the fly swatter game treatment on the experimental class. From the table above, it can be concluded that of the total of 35 students who received the high category, there were three students with a percentage of 8%. Then,

there were six students, with a 15% percentage in the medium category. For the low categories, 26 students have a percentage of 77%.

The results of the post-test frequency distribution in the control group are presented by researchers in Table 4.6 below:

Table 4.6

The frequency distribution of post-test in the control class

No	Score	Classification	Frequency	Percentage
1	80-100	High	6	15%
2	66-79	Medium	19	47%
3	0-65	Low	10	38%

Source: based on the data analysis

Based on the table above, it can be concluded that out of 35 students, only six received the high category with a percentage of 15%. Meanwhile, the medium category was obtained by 19 students, or 47%. In the low category, there are ten students or 38. So, it can be concluded that there is a higher difference in the post-test results of the control class compared to the experimental class.

The final step in this research is hypothesis testing, which determines whether the hypothesis is accepted. This test was carried out to prove the effect of the Fly Swatter Game on vocabulary mastery in class XI students at SMA Negeri 2 Metro. Before testing the hypothesis, it is recommended to see the increase in scores on the pre-test and post-test in both the experimental and control groups. Improvement in writing skills can be seen in the table below:

Table 4.10

The score improvement of vocabulary mastery

Class	Number of Participants	Mean of Pre-Test	Mean of Post-Test	Improvement
Experimental	35	59.20	66.26	7.09
Control	35	59.17	72.54	13.43

The interpretation of the data explained in Table 4.10 is that the mean between the experimental groups is different from the difference in the means

between the experimental and control groups. The mean difference between the two groups, namely the experimental group, was higher than the control group ($7.09 < 13.43$). It can be concluded that learning vocabulary mastery using the fly swatter game is adequate but insignificant because of the difference in results between the experimental and control classes. To understand students' vocabulary mastery in the experimental group and control group, it can be seen in the following diagram:

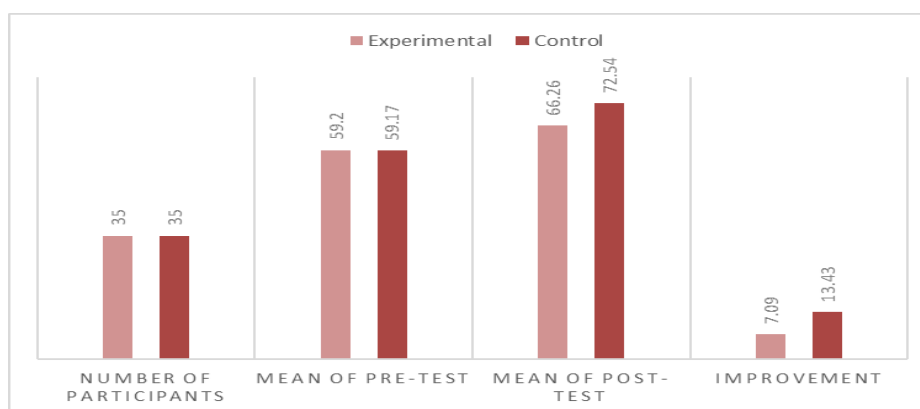


Chart.3 the improvement of pre-test and post-test score

Discussion

This follows the question in the first problem formulation: Is there an influence of using the Fly Swatter game on the vocabulary mastery learning process of class XI students at SMA Negeri 2 Metro? In this study, researchers discussed the treatment effects and test results in this section. This research aimed to see whether the fly swatter game influenced class XI students' mastery of English vocabulary. The research subjects were class XI students of SMA 2 Metro for the 2023/2024 academic year. The sample consisted of two classes, each with 35 students for the experimental and control groups.

The average pre-test scores of the experimental group and control group are (59.20) and (59.17), where it can be seen that the pre-test scores of the experimental group are higher than the control group. However, the average post-test scores for the experimental and control groups were (66.26) and (72.54), which showed that the results of the control group were higher than the experimental group with scores of 7.09 and 13.43. The explanation of the results above shows that using the fly swatter game affects learning

vocabulary mastery in the eleventh grade of SMA Negeri 2 Metro.

Next, the second question of the problem formulation is: Are there any significant changes before and after using the Fly Swatter game on vocabulary mastery in class XI students at SMA Negeri 2 Metro? There is a significant difference in vocabulary mastery when using the Fly Swatter Game. This is proven by the results of data analysis, which shows the calculated t value obtained (4.218) is higher than the t table (2.000) at a significance level of $(0.168) > (0.05)$. Therefore, it can be said that teaching English vocabulary mastery using the Fly Swatter Game is adequate but not significant.

It can be seen in the first previous research (Tanjung et al., 2019) from Tapanuli Education Institute entitled "The Effect of Hangman Game on Students' Vocabulary Mastery." it can be seen that previous researchers also used different games. In previous research, observation and test instruments were used to collect data. The samples from the first previous research used a purposive sampling technique, and data collection used a multiple choice test. While in this study, researchers used pre-test, treatment, and post-test in data collection. In addition, eighth-grade junior high school students were used in previous research as the sample. The results of this research mean that the hangman game significantly affects the ability vocabulary of eighth-grade students of SMP Negeri 1 Padang Bolak. It can be concluded that using the fly swatter game is more effective than using the lecture or memorization method.

The second previous research was by Tressya et al. (2017) from Ganesha University Education, entitled "The Effect Of Using Word Clap Game On Vocabulary Mastery." If you look at this research, it can be seen that the game used is also different from this research. The sample used is different; namely, the previous researcher used a sample of fifth-grade elementary school students, and the second previous researcher also used test instruments, observation, and documentation. The result is that using word clap games significantly affected the students' vocabulary mastery rather than using conventional teaching.

Furthermore, the third previous research by Handayani and Zaharani (2021) from Potensi Utama University, entitled "The Effect Of Spelling Bee On Students' Vocabulary

Mastery." Previous research used the same instruments: pre-test, treatment, and post-test. This case shows that the current and previous research differ in the samples used, the number of test questions, and the games used. The sample used in the previous study was class VII junior high school students who used the spelling bee game, while this research used a sample from the following high school class who used the fly swatter game. The test in the previous study consisted of 20 multiple-choice questions, while this study used 40 multiple-choice questions. The results of previous research were adequate, and there were significant changes. While this research only obtained effective results, the changes were not significant.

Moreover, the fourth previous research (Mulyani 2020) from Tanjungpura University of Pontianak entitled "The Effect of Pictionary Game on The Student's Vocabulary Mastery." Apart from the different samples and games used, there were also differences in the instruments in this previous research. In this study, the instrument only used a pre-test and post-test, carried out before and after the research. Previous research also did not use a control class, meaning only an experimental class was used for data collection. Meanwhile, this research uses experimental and control classes as a comparison. The game used in previous research was Pictionary, and the sample was fifth-grade elementary school students. The results of this research are only to see whether or not the game media can help in learning vocabulary.

Moreover, the last one is the fifth previous research from (Rahmawati et al., 2022) from the University Pematangsiantar entitled "The Effect of Riddle Game On Students' Vocabulary Mastery." This comparison with previous research is not much different from the current research. It is just that the previous study did not provide treatment in the experimental class and only conducted a pre-test and post-test, the same as other previous studies using game media that was different from this research. Previous research also proves that using riddle games in vocabulary learning is effective with significant results.

After looking at the five previous studies, it can be concluded that there are several similarities and differences. The similarity between previous research and this research lies in using the same media, namely games, even though the games used differ. However, differences can be seen in the samples and how the data is collected. The difference

between this research and previous research is that the results prove that the media they use for vocabulary learning is effective, and there are significant changes. In contrast, this research proves that game media is effectively used in learning, but the changes are insignificant.

The reasons why this research is adequate but not significant include several conditions. First, the students underestimate the games used as learning media. Then, it is because using **Cluster Random Sampling**, the researcher does not know the level of all class XI, and there are no superior classes. Third, the games used are not suitable for children at the high school level. It turns out that the control class was more active during conventional learning and easier to understand. Finally, not all students are enthusiastic about games when implementing games as a learning medium in the classroom.

CONCLUSION AND IMPLICATION

Conclusion

The conclusion follows the objectives of the research proposed in the introduction. Based on the research findings and discussion, the conclusion can be drawn as follows:

Teaching English vocabulary mastery using the Fly Swatter Game affects vocabulary mastery in class XI SMA NEGERI 2 Metro. The average vocabulary mastery score for the control class was higher than the experimental group ($76.94 > 77.29$). This means that teaching vocabulary using this game has an effect but not significant influence on students' vocabulary mastery.

There is a significant difference in the use of the Fly Swatter Game in vocabulary mastery. This is proven by the results of data analysis, which shows the calculated t value obtained (1.420) is lower than the t table (2.000) at a significance level of $(0.165) > (0.05)$. Therefore, it can be said that teaching English vocabulary mastery using the Fly Swatter Game is influential but not significant.

Researchers suggest that before conducting research, it is impertative to know the abilities of each class that will be studied. Use games appropriate to the school level to make the class atmosphere fun and require students to think creatively.

Limitation

The limitations of this study lie in the games used and the time available when collecting data, which is very short, so it is not optimal. Apart from using games to increase vocabulary, students' motivation and enthusiasm for learning in class, especially in vocabulary, should also be seen.

This research has several obstacles related to the number of participants who participate in understanding vocabulary knowledge for English language proficiency. This research was conducted without first considering English proficiency at each school or grade level. The results of this research also cannot be generalized because the researchers only conducted research in eleventh grade at the high school level. Also, researchers could not provide treatment because the time was short. Researchers also pay less attention to the media or games used, so the games provided are less attractive in eleventh-grade high school.

Implication

The current research results are essential for integrating teaching vocabulary learning strategies with media that can make the learning atmosphere in the classroom less boring. As we know nowadays, many things challenge teachers to motivate students to learn because with students being motivated to be enthusiastic about learning, students can quickly absorb the lessons being taught.

This is what motivated the researcher to conduct this research, namely wanting to create a learning atmosphere that is creative and also does not make students bored. This can inspire teachers in teaching, especially in learning vocabulary in English lessons; choosing suitable media or games can improve student learning outcomes.

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