

**THE INFLUENCE OF SHOOPING LIST GAME TOWARDS
STUDENTS' VOCABULARY MASTERY AT THE SECOND SEMESTER
OF THE SEVENTH CLASS AT MTS RAUDLATUL JANNAH NATAR
LAMPUNG SELATAN IN 2013/2014**

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Abstract

This study aims to know and describe the influence of Shopping List game towards students' vocabulary mastery. This study used experimental method. The population of this study was all of the students at the second semester of MTs RaudlatulJannah. Two classes were used as the sample of this study. They were one class as experimental class and one class as control class. The writer took the classes randomly (cluster random sampling). There were two variables investigated in this study, the independent variable was Shopping List game and the dependent variable was students' vocabulary mastery. The data of this study were obtained by giving 50 vocabulary test items with four options: a, b, c, and d (multiple choices). Then to analyze the influence of Shopping List game towards students' vocabulary mastery, the writer used *t-test*. In this study, the writer calculated the score of experimental class and control class. For experimental class found that $\bar{X}_1 = 70.86$. For control class found that $\bar{X}_2 = 48.82$. The findings of this study revealed that the score of t_{test} was higher than t_{table} ($t_{test} = 9.84$ and t_{table} for significant level 5% = 1.98 and 1% = 2.62), so the hypothesis was accepted. It could be concluded that there was positive influence of Shopping List game towards students' vocabulary mastery.

Keywords: *Control; Experiment; Influence; Shopping List game; Vocabulary*

Abstrak

Penelitian ini bertujuan untuk mengetahui dan mendeskripsikan pengaruh *Shopping List game* terhadap penguasaan kosa kata siswa. Penelitian ini menggunakan metode eksperimen. Populasi dari penelitian ini adalah semua siswa semester dua di MTs Raudlatul Jannah. Penelitian ini menggunakan dua kelas sebagai sampel, yaitu satu kelas sebagai kelas eksperimen dan satu kelas sebagai kelas kontrol. Kelas-kelas tersebut diambil secara acak (*cluster random sampling*). Ada dua variabel yang diteliti, yaitu variabel bebas (*Shopping List game*) dan variabel terikat (penguasaan kosa kata siswa). Data dari penelitian ini diperoleh dengan memberikan test berupa 50 soal kosa kata dengan empat pilihan: a, b, c dan d (pilihan ganda). Kemudian untuk menganalisa pengaruh *Shopping List game* terhadap penguasaan kosa kata siswa, peneliti menggunakan *t-test*. Dalam penelitian ini, peneliti menghitung skor kelas eksperimen dan kontrol. Untuk kelas eksperimen ditemukan $\bar{X}_1 = 70.86$. Untuk kelas kontrol ditemukan $\bar{X}_2 = 48.82$. Hasil dari penelitian ini menyatakan bahwa skor t_{test} lebih besar daripada t_{table} ($t_{test} = 9.84$ dan t_{table} untuk tingkat signifikan 5% = 1.98, dan 1% = 2.62), jadi hipotesis diterima. Penelitian ini dapat disimpulkan bahwa *Shopping List game* memberikan pengaruh positif terhadap penguasaan kosa kata siswa.

Keywords: *Kontrol; Eksperimen; Pengaruh; Shopping List game; Kosa kata.*

1. INTRODUCTION

This research examines the influence of Shopping List game towards students' vocabulary mastery. Vocabulary is one of language components. In learning English at Junior High School, the students are also demanded to learn about those four skills of language. To master them, they must have adequate vocabulary. Because without vocabulary, the students cannot speak English and listen what the speaker mean. Not only those, but the students are difficult to comprehend English text even writing in English. That's why the students should have many vocabularies. It is supported by Wilkins in Thornbury (2002: 13) states that "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed".

Based on the interview with an English teacher during preliminary research, the writer found that the students only learn English from an English book of the seventh class. The teacher has never used Shopping List game in teaching vocabulary. The writer thinks that there are so many techniques in teaching vocabulary in the classroom. It is used because vocabulary is complex and very important component of language. So it needs full attention to teach it in the classroom.

One of techniques that can be used is game. The use of game in the classroom has many advantages. The writer mentions the advantages of using games according to Carrier (1980: 6) namely:

1. Games give a variety of tools to facilitate the teaching-learning process.
2. Games are flexible.
3. Games make the lesson less monotonous.
4. Games raise the students' motivation.
5. Games make students produce language subconsciously.
6. Games stimulate students' participation and give them confidence.
7. Games transform the teacher's role from that of formal instructor to that of an organizer or/and moderator of the class.
8. Games can also serve as a testing mechanism.

There are three previous studies that related to the use of game towards vocabulary mastery. First, comes from Azar (2012) entitled "The Effect of Games on EFL Learners' Vocabulary Learning Strategies". The objective of this research was to describe whether games can help EFL students learn vocabulary effectively?. There were 23 students between the ages of 10 and 13 all in beginner level in the class. Within four weeks the researcher tried to apply as many games as possible in our classes at the language Institution to learn from learners' reactions whether they were interested in games or not and if games could help improve their existing vocabulary.

Second research by Tuan (2012) entitled "Vocabulary Recollection through Games". To examine whether games influence young learners' vocabulary recollection in Way Ahead classes at Ngoi Nha Thong Thai Elementary School (The House of Wisdom Elementary School), Vietnam. The population of the research comprised 121 students in six classes of Way Ahead at Ngoi Nha Thong Thai Elementary School (The House of Wisdom Elementary School). This research entailed a quasi-experimental research design. The impact of using games on the learners' vocabulary retention was based on quantitative analyses of the results of the pretest and posttests. The results of the pretest and two posttests indicate that the experimental group surpassed the control one in recollecting concrete object words during the immediate retention stage and the delayed retention one. The results of this research may have the following implications for the teaching and learning of vocabulary at Ngoi Nha Thong

Thai Elementary School (The House of Wisdom Elementary School) in particular and in other elementary schools in general.

Third, by Efendi (2013) entitled “The Use of Games to Improve Vocabulary Mastery”. The objective of this research was to describe the way of “got it game” and “back to the board game” in improving vocabulary mastery of the seventh grade students of SMPN 5 Malang. The research design of this study is classroom action research (CAR). The result of this study was the use of games was success in improving students’ vocabulary mastery because the result after treatment was higher than the minimum standard score in the criteria of success.

The result of students’ vocabulary mastery during preliminary research found that the students’ vocabulary mastery needs to be improved. This study aims to know and describe the influence of Shopping List game towards students’ vocabulary mastery at the second semester of the seventh class. So, the present study focus on the influence of shopping List game towards students’ vocabulary mastery.

2. BACKGROUND

2.1 Concept of Vocabulary

Language has the main position when communication is occurred. Language consists of a series of words. As Thornbury (2002: 1) says “all languages have words. In English those words are called vocabulary. Since we have been born until now, we have been using words in communication. It means that vocabulary is the central in producing language. It is supported by Thornbury (2002: 1) who states that “without grammar very little can be conveyed, without vocabulary nothing can be conveyed”.

English in Indonesia is taught as a foreign language. As a foreign language, it is difficult by students to master all components about English. However, the basic component in learning a language is vocabulary. It is supported by Thornbury (2002: 72) who states that “vocabulary is central to the learning of a foreign language at primary level”.

To make our teaching vocabulary is easier; we should pay attention five essential steps in vocabulary learning based on research into learner strategies according to Hatch and Brown (1995: 372) in Cameron (2001: 84):

1. Having sources for encountering new words
2. Getting a clear image, whether visual or auditory or both, for the forms of the new words
3. Learning the meaning of the words
4. Making a strong memory connection between the forms and meanings of the words
5. Using the words

Besides teaching by using the five steps above, as an English teacher we should learn some factors to decide kind of material that will be thought. Thornbury (2002: 75-76), states that before giving new vocabulary, the teachers should decide to teach a related set of word by using the following factors:

1. The level of the learners (whether beginners, intermediate, or advanced)
2. The learners’ likely familiarity with the words (learners may have met the words before even though they are not part of their active vocabulary)
3. The difficulty of the items – whether, for example, they express abstract rather than concrete meanings, or whether they are difficult to pronounce

4. Their ‘teachability’ – whether, for example, they can be easily explained or demonstrated
5. Whether items are being learned for production (in speaking or writing) or for recognition only (as in listening and reading)

Teaching vocabulary in the class needs some implications. The implication of these findings for the teaching based on Thornbury (2002: 30) :

1. Learners need task and strategies to help them organize their mental lexicon by building networks of associations - the more the better.
2. Teachers need to accept that the learning of new words involves a period of ‘initial fuzziness’.
3. Learners need to wean themselves off a reliance on direct translation from their mother tongue.
4. Words need to be presented in their typical contexts, so that learners can get a feel for their meaning, their register, their collocations, and their syntactic environments.
5. Teaching should direct attention to the sound of new words, particularly the way they are stressed.
6. Learners should aim to build a threshold vocabulary as quickly as possible.
7. Learners need to be actively involved to the learning of words.
8. Learners need multiple exposures to words and they need to retrieve words from memory repeatedly.
9. Learners need to make multiple decisions about words.
10. Memory of new words can be reinforced if they are used to express personally relevant meanings.
11. Not all the vocabulary that the learners need can be ‘taught’: learners will need plentiful exposure to talk and text as well as training for self-directed learning.

2.2 Concept of Using Game

Game is a competition which at the end consists of the winner and loser. Game creates enjoyment. It is better if game used in teaching and learning. Especially for learning foreign language, game can reduce students’ stress. Patricia (2003: 233) states that “games are associated with fun”. It is supported by Wright, Andrew *et al* (2006: 1) who says that ‘game’ to mean an activity which is entertaining and engaging, often challenging, and an activity which the learners play and usually interact with others.

Everyone likes game especially children. Paul (2003: 49) states that “Games play a central role in a child – centered lesson and make it possible for children to fully immerse themselves in learning. According to Wright, Andrew *et al* (2006: 2) that games help and encourage many learners to sustain their interest and work. It means learning by using game can increase learners’ enthusiastic. Therefore games are called the interesting way because game can increase students’ interest in learning English.

The writer mentions the advantages of using games according to Carrier (1980: 6) namely:

1. Games give a variety of tools to facilitate the teaching-learning process.
2. Games are flexible.
3. Games make the lesson less monotonous.
4. Games raise the students’ motivation.
5. Games make students produce language subconsciously.
6. Games stimulate students’ participation and give them confidence.

7. Games transform the teacher's role from that of formal instructor to that of an organizer or/and moderator of the class.
8. Games can also serve as a testing mechanism.

<http://www.teoriaypraxis.uqroo.mx/doctos/Numero4/Martinez-Perez-Portillo.pdf>

The advantages of games are not only for the learners, but also for the teacher. Wright, Andrew *et al* (2006: 2) states that games also help the teacher to create context in which the language is useful and meaningful. It means Games can help the teacher to create the material more specific. So that, students can receive the material easily. Richard-Amato A. Patricia (2003: 233) says that games can develop and reinforce concepts (e.g., colors, shapes, numbers, word definitions), add diversions to the regular classroom activities, and even break the ice, particularly in the case of true beginners.

2.3 Concept of Shopping List Game

In this research, the writer used the procedure of Shopping List game in "Have Fun with Vocabulary" by Barnes *et al* (1996: 16, 85). Based on the procedure, the writer defines that Shopping List game is a language game where the students are asked to find and classify the things based on the category.

The writer assumes that Shopping List game has many advantages. One of the most important advantages is to increase students' vocabulary mastery. It is suitable with the title of this book. But the goal of this game is more specific, namely to understand about the certain category. It is also supported by Barnes *et al* in the procedure (1996: 16) namely give each group a copy of the handout on page 85. Tell them that they must sort the items into countable and uncountable and write them in the correct columns. It means each group gets the list of things then classifies them so that the students can find new words easily.

To make this game more interested, the writer thinks that it can be made a variation without change the procedure. For example we can replace countable and uncountable things into name of animals, name of vegetables, medical equipments, etc. But it still focuses on nouns that are name of things that can be bought.

This game can build students' social interaction and solidarity because based on the procedure, Shopping List game is a game which played in group. The students are divided into two groups. One group consists of boys and one other group consists of girls. So they can discuss it with their group.

Not only them, but this game is also fun. It is supported by Barnes *et al* (1996: 1) who state that "not only do the quizzes generate a wealth of useful vocabulary and discussion, but they have proved to be a lot of fun".

2.4 Procedures of Teaching Vocabulary by Using Shopping List Game

Below are the procedures of teaching vocabulary by using shopping list game according to Barnes *et al* (1996: 16)

1. Give each group a copy of Shopping List. Tell them that they must sort the items into countable and uncountable and write them in the correct columns.
2. Tell the groups they have 5 minutes and start them all at the same time. Warn them if they have only a minute left and make sure they all stop when told.
3. Get the groups to exchange papers for marking, and check the answers orally. Ask each team captain to read out the score and team letter, and write this up on the scoreboard. Record the running total.
4. Collect the papers. During the next round, check them and amend any mistakes.

Pedro's teacher is giving the class a party to celebrate the end of term, but they must do the shopping and collect the equipment for the games. He has told them the girls must buy all

the COUNTABLE things and the boys the UNCOUNTABLE things. You must sort out the list of them:

Mineral water, Rice, Chicken pate, Rolls, Cheese, Paper, Paper Clips, Orange juice, A roll of sellotape, Drinking chocolate, A box of chocolates, Salad, Ballons, Paper napkins, Prizes, Ice-Cream, Bread, Butter, Fruit, Tomatoes, Flowers, Packets of crips, Nuts, Pasta. Answer sheet which is given for each group

COUNTABLE	UNCOUNTABLE

3. RESEARCH METHOD

The goal of this research intended to find out the influence of Shopping List game in teaching vocabulary, therefore this research based on the experimental method. In this research, the writer took two classes' namely experimental class and control class. Experimental class was taught by using Shopping List game. Control class was taught by using translation technique.

There were two variables in this research. The first was independent variable (Shopping List game) symbolized by (X). The second was dependent variable (students' vocabulary mastery) symbolized by (Y).

The population of this research was the students at the second semester of seventh class at MTs RaudlatulJannahNatar Lampung Selatan. Then the writer took two classes as the sample of research. The classes are the experimental class and the control class. The writer taught vocabulary by using Shopping List game in the experimental class. Whereas in the control class, the writer taught by using translation technique.

In this research, the writer used Cluster Random sampling technique. It was used because the sample was classes not individuals and the ability of population were homogeneous.

To get the data of the students' vocabulary mastery, the writer gave the test to the sample. The type of test was the objectives test namely multiple choices. There are 50 vocabulary test items with four options: a, b, c, and d, the score of each item is 2.

Content validity was used to know the validity of test item. It meant that the test items were designed based on the course book that the students used in school and designed based on the curriculum of MTs.

Whereas to determine reliability of the test, the writer used 'Split Half Technique' with the following steps:

1. Give try out items test to the students that are taken from out of the sample.
2. Divide the items test into odd and even.
3. Analyze the test by using Product Moment Formula.

$$r_{xy} = \frac{n \sum xy - (\sum x) (\sum y)}{\sqrt{\{n \sum x^2 - (\sum x)^2\} \{n \sum y^2 - (\sum y)^2\}}}$$

4. Calculate the reliabilities of the item test by using Spearman Brown Formula as follows:

5. Consult the result with the criteria reliability as follows:
 - a. Reliability Coefficient 0.800 – 1.00 is very high

- b. Reliability Coefficient 0.600 – 0.88 is high
- c. Reliability Coefficient 0.400 – 0.600 is fair
- d. Reliability Coefficient 0.200 – 0.400 is low
- e. Reliability Coefficient 0.00 – 0.200 is very low (Arikunto, 2006: 276)

There were five analyses in this research. The analyses included of normality of the test; homogeneity of variance; hypothesis of test; testing of equality of two average score; and testing of the different of two average score.

The first analysis was normality of the test. It analyzed to know whether the data have normal distribution or no. The writer used Chi-Square ratio (χ^2 ratio)

$$\chi^2 \text{ ratio} = \sum_{i=1}^k \frac{(O_i - E_i)^2}{E_i}$$

The criteria of the test:

Rejected H_0 if $\chi^2 \text{ ratio} \geq \chi^2 \text{ table}$ (1- α) (k-3) (Sudjana, 1996: 273)

The second was homogeneity of variance. It analyzed to know whether the data were homogeneous or not. The formula:

$$F = \frac{\text{Highest Variance}}{\text{Lowest Variance}}$$

The criteria of the test:

Accepted H_0 if $F (1 - \alpha) (n - 1) < F < F_{1/\alpha} \alpha (n_1 - 1, n_2 - 2)$, rejected H_0 if $F \geq F_{1/\alpha} \alpha (n_1, n_2)$. (Sudjana, 1996: 249-250)

The third was hypothesis. After giving the test and corrected it, the writer found the result of test given. It was possible to know the influence of using shopping list game towards students' vocabulary mastery. The statistical formula that was used by the writer in this research is *T-test*. Before using *T-test*, the writer determined the average (\bar{x}) and the variance (S^2).

1. The average (\bar{x}) is calculated by using formula:

$$\bar{x} = \frac{\sum x_i}{N}$$

2. Variance (S^2) is calculated by using formula:

$$S^2 = \frac{n^2 - (\sum x_i^2) - (\sum x_i)^2}{n(n-1)}$$

3. T-test formula:

$$t_{\text{test}} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S^2}{n_1} + \frac{S^2}{n_2}}}$$

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

The criteria of the test:

Accepted H_0 if $-t_{\text{table}} < t_{\text{ratio}}$ is value which is indicated in the table with degree of freedom = $n_1 + n_2 - 2$ (Sudjana, 1996: 239)

The fourth was Testing of the Equality of Two Average Score. With criteria of the test:

H_0 is accepted for 5% and 1% if $t_{\text{ratio}} < t_{\text{table}}$ with df = (N-1)

The last was testing of the different of two average score. With criteria of the test:

H_0 is rejected if $t_{\text{test}} \geq t_{\text{table}}$ with df = (N-1)

For significant level $\alpha = 5\%$ or 0.05 and $\alpha = 1\%$ or 0.01

(Sudjana, 1996:233)

4. RESULT AND DISCUSSION

4.1 Data Analysis

4.1.1 Reliability of the Test

Based on the calculation, the data were known as follow:

$$\begin{aligned} n &= 20 \\ \sum X &= 213 \\ \sum Y &= 228 \\ \sum X^2 &= 2369 \\ \sum Y^2 &= 2664 \\ \sum XY &= 2493 \end{aligned}$$

Then, analyzed the test by using *Product Moment Formula*.

$$r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{\{n \sum x^2 - (\sum x)^2\} \{n \sum y^2 - (\sum y)^2\}}}$$

It was found that $r_{xy} = 0.80$

Then calculate the reliabilities of the item test by using *Spearman Brown Formula*:

$$r_{gg} = \frac{2r_{xy}}{1+r_{xy}}$$

It was found that $r_{gg} = 0.89$

After consulting the result with criteria of reliability, it was known that the item test was very high. So the test items can be used to measure the students' vocabulary mastery.

4.1.2 Normality of the Test

4.1.2.1 Normality of the Test in Experimental Class

The result of the table when calculated the score of vocabulary mastery in experimental class (see appendix), it was known that the highest score was 88 and the lowest score was 48 from n= 37.

SPAN (R) = the Highest score of the Data – the Lowest Score of the Data = 40

The total number of interval class (K) = $1 + 3.3 \log n = 6$

Length of interval class (P) = $\frac{R}{K} = 7$

Then the result above was included into table of list of distribution frequency as follows:

Table 7. The List of Distribution Frequency of the Test Result of Experimental Class

Score	f_1	X_1	X_1^2	$f_1 X_1$	$f_1 X_1^2$
48 – 54	1	51	2601	51	2601
55 – 61	4	58	3364	232	13456
62 -68	9	65	4225	585	38025
69 – 75	11	72	5184	792	57024
76 – 82	10	79	6241	790	62410
83 - 89	2	86	7396	172	14792
Σ	37			2622	188308

Source: *The Data Analysis*

$$\begin{aligned}\sum f_1 \cdot X_1 &= 2622 \\ \sum f_1 \cdot X_1^2 &= 188308 \\ n &= 37\end{aligned}$$

It was found that the average and standard deviation as follows:

$$\begin{aligned}\bar{X} &= \frac{\sum f_1 \cdot X_1}{\sum f_1} \\ \bar{X} &= 70.86\end{aligned}$$

Then counted standard deviation:

$$\begin{aligned}S_1^2 &= \frac{n \cdot \sum f_1 \cdot X_1^2 - (\sum f_1 \cdot X_1)^2}{n \cdot (n-1)} \\ S_1 &= 8.33\end{aligned}$$

The next step was to determine the expected frequency (E_i) and observed frequency (O_i) as follows:

1. Delimitating the boundary of the class (X) by subtracting the lowest score in the class by 0.5.
2. Calculating Z for boundary of the class with the formula $Z = \frac{X - \bar{X}}{S}$
3. Calculating wide of interval class by seeing Z value list.
4. Calculating expected frequency (E_i) by multiplying wide of every interval wide the total of the data, that is $E_i = L_1 \cdot n$

From calculating the formula above, we got the result as follows:

Table 8. List of Distribution Expected and Observed Frequency of Experimental Class

X	Z	E_1	L	E_1	O_1
47.5	-2.80	0.4974	0.0224	0.83	1
54.5	-1.96	0.4750	0.1064	3.94	4
61.5	-1.12	0.3686	0.2583	9.56	9
68.5	-0.28	0.1103	0.3226	11.94	11
75.5	0.56	0.2123	0.2069	7.66	10
82.5	1.40	0.4192	0.0683	2.53	2
89.5	2.24	0.4875			

Source: *The Data Analysis*

Determined χ^2_{ratio} by using the following formula:

$$\begin{aligned}\chi^2_{\text{ratio}} &= \sum \frac{(O_i - E_i)^2}{E_i} \\ \chi^2_{\text{ratio}} &= 0.95\end{aligned}$$

Criteria Test:

Reject H_0 if $\chi^2_{\text{ratio}} \geq \chi^2 (1 - \alpha) (k - 3)$

By looking at H table, we found the value:

For the significant level of 5% ($\alpha = 0.05$)

$$\begin{aligned} \chi^2_{table} &= \chi^2 (1 - 0.05) (6 - 3) \\ &= \chi^2 (0.95) (3) \\ &= 7.81 \end{aligned}$$

For significant level of 1% ($\alpha = 0.01$)

$$\begin{aligned} \chi^2_{table} &= \chi^2 (1 - 0.01) (6 - 3) \\ &= \chi^2 (0.99) (3) \\ &= 11.3 \end{aligned}$$

Based on the calculation above, it was found at significant level of 0.05 and 0.01 that $\chi^2_{ratio} < \chi^2_{table}$. So, the hypothesis was accepted. It said that the data had normal distribution.

4.1.2.2 Normality of the Test in Control Class

The result of the table when calculated the score of vocabulary mastery in control class, it was known that the highest score was 70 and the lowest score was 34 from $n=38$.

$$\begin{aligned} \text{SPAN (R)} &= \text{the Highest score of the Data} - \text{the Lowest Score of the Data} \\ &= 36 \end{aligned}$$

$$\begin{aligned} \text{The total number of interval class (K)} &= 1 + 3.3 \log n \\ &= 6 \end{aligned}$$

$$\begin{aligned} \text{Length of interval class (P)} &= \frac{R}{K} \\ &= 6 \end{aligned}$$

Then the result above was included into table of list of distribution frequency as follows:

Table 9. The List of Distribution Frequency of the Test Result of Control Class

Score	f_2	X_2	X_2^2	$f_2 X_2$	$f_2 \cdot X_2^2$
34 – 39	9	36.5	1332.25	328.5	11990.25
40 – 45	7	42.5	1806.25	297.5	12643.75
46 - 51	8	48.5	2352.25	388	18818
52 – 57	6	54.5	2970.25	327	17821.5
58 – 63	4	60.5	3660.25	242	14641
64 – 69	3	66.5	4422.25	199.5	13266.75
70 - 75	1	72.5	5256.25	72.5	5256.25
Σ	38			1855	94437.5

Source: The Data Analysis

$$\Sigma f_2 \cdot X_2 = 1855$$

$$\Sigma f_2 \cdot X_2^2 = 94437.5$$

$$n = 38$$

It can be searched the average and standard deviation as follows:

$$\bar{X} = \frac{\Sigma f_2 \cdot X_2}{\Sigma f_2}$$

$$\bar{X} = 48.82$$

Then it was counted standard deviation:

$$S_2^2 = \frac{n \cdot \sum f_2 \cdot X_2^2 - (\sum f_2 \cdot X_2)^2}{n \cdot (n-1)}$$

$$S_2 = \sqrt{104.98}$$

$$S_2 = 10.25$$

The next step was to determine the expected frequency (E_i) and observed frequency (O_i) as follows:

1. Delimitating the boundary of the class (X) by subtracting the lowest score in the class by 0.5.
2. Calculating Z for boundary of the class with the formula $Z = \frac{X - \bar{X}}{S}$
3. Calculating wide of interval class by seeing Z value list.
4. Calculating expected frequency (E_i) by multiplying wide of every interval wide the total of the data, that is $E_i = L_1 \cdot n$

From calculating the formula above, we got the result as follows:

Table 10. List of Distribution Expected and Observed Frequency of Control Class

X	Z	Z ₂	L	E ₂	O ₂
33.5	-1.49	0.4319			
39.5	-0.91	0.3186	0.1133	4.31	9
45.5	-0.32	0.1255	0.1931	7.34	7
51.5	0.26	0.1026	0.2281	8.67	8
57.5	0.85	0.3023	0.1997	7.59	6
63.5	1.43	0.4251	0.1228	4.67	4
69.5	2.02	0.4783	0.0532	2.02	3
75.5	2.61	0.4955	0.0172	0.65	1

Source: The Data Analysis

Determined χ^2_{ratio} by using the following formula:

$$\chi^2_{ratio} = \sum \frac{(O_i - E_i)^2}{E_i}$$

$$\chi^2_{ratio} = 6.27$$

Criteria Test:

Reject H_0 if $\chi^2_{ratio} \geq \chi^2 (1 - \alpha) (k - 3)$

For the significant level of 5% ($\alpha = 0.05$)

By looking at H table, we found the value:

$$\chi^2_{table} = \chi^2 (1 - 0.05) (6 - 3)$$

$$= \chi^2 (0.95) (3)$$

$$= 7.81$$

For significant level of 1% ($\alpha = 0.01$)

$$\chi^2_{table} = \chi^2 (1 - 0.01) (6 - 3)$$

$$= \chi^2 (0.99) (3)$$

$$= 11.3$$

Based on the calculating above, it was found at significant level of 0.05 and 0.01 that $X_{ratio}^2 < X_{table}^2$. So, the hypothesis was accepted. It was said that the data had normal distribution.

4.1.3 The Homogeneity of Variance

From the calculating above obtained:

1. The highest variance was the value of standard deviation from control class
($S_2^2 = 104.98$)
2. The lowest variance was the value of standard deviation from experiment class
($S_1^2 = 69.45$)

Then the result of the highest variance and lowest variance included into statistical formula:

$$F = \frac{\text{Highest Variance}}{\text{Lowest Variance}}$$

$$F = \frac{104.98}{69.45}$$

$$F = 1.51$$

By looking at I table, we found the value:

For $\alpha = 0.05$ obtained:

$$F_{table} = F (\frac{1}{2}, \alpha) (37 - 1) (38 - 1)$$

$$F_{table} = F (\frac{1}{2}, 0.05) (36) (37)$$

$$F_{table} = 1.78$$

For $\alpha = 0.01$ obtained:

$$F_{table} = F (\frac{1}{2}, \alpha) (37 - 1) (38 - 1)$$

$$F_{table} = F (\frac{1}{2}, 0.01) (36) (37)$$

$$F_{table} = 2.26$$

In fact that at level 0.05 and also 0.01 was obtained $F_{ratio} < F_{table}$, so that H_0 was accepted. It was said that the variance of the data was homogeneous.

4.1.4 The Hypothesis of Test

To test the hypothesis in this research, the writer used statistical formula of "t-test":

$$t_{test} = \frac{\bar{X}_1 - \bar{X}_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \quad \text{With:}$$

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

$$S^2 = \frac{(37 - 1)69.45 + (38 - 1)104.98}{37 + (38 - 2)}$$

$$S = 9.35$$

Then the result above calculated into t-test formula:

$$t_{test} = \frac{X_1 - X_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$t_{test} = \frac{70,86 - 48,82}{9,88 \sqrt{\frac{1}{37} + \frac{1}{38}}}$$

$$t_{test} = 9.84$$

4.1.5 The Testing of The Equally of Two Average Score

After analyzing the data, to show any influence of shopping list game towards students' vocabulary mastery the hypothesis were:

H_0 : $\mu_1 = \mu_2$ (there is no influence of Shopping List game towards students' vocabulary mastery)

H_a : $\mu_1 \neq \mu_2$ (there is an influence of Shopping List game towards students' vocabulary mastery)

H_0 Rejected if $t_{test} > t_{table} (1 - \frac{1}{2} \alpha)$ and H_a accepted with $dk (n_1 + n_2 - 2)$

$$\begin{aligned} dk &= (n_1 + n_2 - 2) \\ &= 37 + 38 - 2 \\ &= 37 + 36 \\ &= 73 \end{aligned}$$

By looking at G table, found the value:

Testing criterion 1:

For level 5% ($\alpha = 0.05$)

$$\begin{aligned} t_{table} &= (1 - \frac{1}{2} 0.05) 73 \\ &= 0.975 \cdot 73 \\ &= 1.98 \end{aligned}$$

Testing criterion 2:

For level 1% ($\alpha = 0.01$)

$$\begin{aligned} t_{table} &= (1 - \frac{1}{2} 0.01) 73 \\ &= 0.995 \cdot 73 \\ &= 2.62 \end{aligned}$$

Based on the data analysis, it was found that $t_{test} = 9.84$ and t_{table} for level 5% = 1.98 and for level 1% = 2.62. So, H_a was accepted because $t_{test} \geq t_{table}$ and H_0 was rejected. So there was an influence of Shopping List game towards students' vocabulary mastery at the second semester of the seventh class at MTs Raudlatul Jannah natar lampung Selatan in 2012/2013.

4.1.6 The Testing of the Different of Two Average Score

The testing of hypothesis was to show the average score of the influence of Shopping List game towards students' vocabulary mastery would be higher than without Shopping List game.

$H_0^2: \mu_1 \leq \mu_2$ (The average of students' vocabulary mastery that are taught by using Shopping List game is lower than that of those who taught by using translation technique).

$H_a^2: \mu_1 \geq \mu_2$ (The average of students' vocabulary mastery that are taught by using Shopping List game is higher than that of those who taught by using translation technique).

From the result above we got that $t_{test} = 9.84$ and $t_{table} = 1.98$ and 2.92

The testing criterion:

If $t_{test} \geq t_{table}$, H_0 rejected and H_a accepted with $dk = (n_1 + n_2 - 2)$ at significant level 5% ($\alpha = 0.05$) and 1% ($\alpha = 0.01$).

So, H_a was accepted because $t_{test} \geq t_{table}$ and H_0 was rejected. So the average score of the students' vocabulary mastery that are taught by using Shopping List game was higher than that of those who taught by using translation technique at the second semester of the seventh class at MTs Raudlatul Jannah natar lampung Selatan in 2013/2014.

4.2 Discussion

The average score of students' vocabulary mastery who learn through Shopping List game was higher than that of those who learn through translation technique. It was proven by the average score of the experimental class ($\bar{X}_1 = 70.86$) was higher than the average score of the control class ($\bar{X}_2 = 48.82$). The result of hypothesis testing $t_{test} = 9.84$ and t_{table} for significant level 5% = 1.98 and 1% = 2.62, based on the testing criterion the writer gave $t_{test} \geq t_{table}$. So there was positive influence of shopping list game towards students' vocabulary mastery.

5. CONCLUSION

Based on the research of data analysis on the previous explanation about "The Influence of Shopping List Game towards Students' Vocabulary Mastery at the Second Semester of the Seventh Class at MTs RaudlatulJannahNatar Lampung Selatan in 2013/2014", the writer made:

1. The average score of students' vocabulary mastery who learn through Shopping List game was higher than that of those who learn through translation technique. It was proven by the average score of the experimental class ($\bar{X}_1 = 70.86$) was higher than the average score of the control class ($\bar{X}_2 = 48.82$).
2. The result of hypothesis testing $t_{test} = 9.84$ and t_{table} for significant level 5% = 1.98 and 1% = 2.62, based on the testing criterion the writer gave $t_{test} \geq t_{table}$. It means that there was positive influence of shopping list game towards students' vocabulary mastery in addition; the influence of shopping list game could increase students' vocabulary mastery.

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