

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter presents the results of the data analysis. Three main topics will be discussed in this part covering description of data, hypothesis testing, and discussion.

A. The description of Data

In this section, the researcher presents the score of students' vocabulary mastery before and after being taught by using "Shop-n-Spree" game. As mentioned before, the researcher used test as the instrument to collect data. The test was given to VII D class as the sample of this research. The form of test was multiple choices and matching test. The researcher presented and analyzed the data through pretest and posttest. The pretest was given before teaching the class by using Shop-n-Spree game, and the posttest was given after implementing the Shop-n-Spree game. The scores of pretest and posttest were described in the form of table that includes the pretest and posttest score in the single group.

1. Description of Proficiency of Students Before being Taught by Using Shop-n-Spree game

This section presents the students' vocabulary mastery before being taught by using Shop-n-Spree game. In this presentation, the researcher presented and analyzed the collected data through pretest which are administered to 34 students. The descriptions of the students' score before being taught by using Shop-n-Spree game can be seen in table 4.1, as follows:

Table 4.1. The Students' Score Before being Taught by Using Shop-n-Spree Game

o.	N	Name	Score
	1	AAZ	60
	2	AA	52
	3	AF	48
	4	ANF	84
	5	ARP	56
	6	AFSP	56
	7	BR	44
	8	CAS	72
	9	DPM	32
0	1	DAN	76
1	1	DS	52
2	1	ESDZ	64
3	1	FK	44
4	1	FWW	32
5	1	GT	36
6	1	IRRS	64
7	1	IT	80
8	1	KSA	60
9	1	LDP	40
0	2	MS	96
1	2	MKNA	48
2	2	MFBP	52
3	2	MBS	56
4	2	MSP	68
5	2	NAT	80
6	2	NAA	88
7	2	PAIN	52
8	2	RP	68
	2	RNN	48

9			
0	3	SD	64
1	3	SDA	36
2	3	TIW	32
3	3	VYA	84
4	3	WS	64
			$\sum x = 1990$

Table 4.1 shows that from 34 students there are 26 students got score under 70 and 8 students got score more than 70.

2. Description of Proficiency of Students After being Taught by Using Shop-n-Spree game

This section presents the students' vocabulary mastery after being taught by using Shop-n-Spree game. The descriptions were presented in table 4.2:

Table 4.2. The Students' Score After being Taught by Using Shop-n-Spree Game

No.	N	Name	Score
	1	AAZ	76
	2	AA	72
	3	AF	72
	4	ANF	100
	5	ARP	80
	6	AFSP	84
	7	BR	76
	8	CAS	80
	9	DPM	68
0	1	DAN	84
1	1	DS	88
2	1	ESDZ	84

3	1	FK	80
4	1	FWW	60
5	1	GT	60
6	1	IRRS	76
7	1	IT	88
8	1	KSA	84
9	1	LDP	88
0	2	MS	100
1	2	MKNA	72
2	2	MFBP	64
3	2	MBS	80
4	2	MSP	60
5	2	NAT	84
6	2	NAA	88
7	2	PAIN	84
8	2	RP	80
9	2	RNN	88
0	3	SD	80
1	3	SDA	68
2	3	TIW	64
3	3	VYA	88
4	3	WS	84
			$\sum x = 2692$

According to the table 4.2 above, most of the students got score over KKM in the posttest and only 4 students got score under 70.

B. Data Analysis

The researcher provides the table about the list of pretest and posttest total score to make it easier in identifying mean and T-test and analyzed it. The analysis of this study is come from the students' score of test. As explained before, that the instrument that used in this research are multiple choices and matching test including pretest and posttest. The analysis is made to find out whether there is any significant difference in students' vocabulary score before and after taught using Shop-n-Spree game. It is also to find out the effectiveness of Shop-n-Spree game in building up the students' vocabulary mastery and to show whether Shop-n-Spree game give positive effect or not in increasing the students' vocabulary mastery.

The result of data analysis is from the students' score of pretest and posttest that can be seen in table 4.3, as follows:

Table 4.3. The Statistical Result Using T-Test

o	S ubject	Pre test (x)	Pos ttest (y)	d (y-x)	d ²
	A AZ	60	76	1 6	256
	A	52	72	2 0	400
	A F	48	72	2 4	576
	A NF	84	100	1 6	256
	A RP	56	80	2 4	576
	A	56	84	2	784

	FSP			8		
	B	44	76	3		102
	R			2	4	
	C	74	80	6		36
	AS					
	D	32	68	3		129
	PM			6	6	
0	D	76	84	8		64
	AN					
1	D	52	88	3		129
	S			6	6	
2	E	64	84	2		400
	SDZ			0		
3	F	44	80	3		129
	K			6	6	
4	F	32	60	2		784
	WW			8		
5	G	36	60	2		576
	T			4		
6	I	64	76	1		144
	RRS			2		
7	I	80	88	8		64
	T					
8	K	60	84	2		576
	SA			4		
9	L	40	88	4		230
	DP			8	4	
0	M	96	100	4		16
	S					
1	M	48	72	2		576
	KNA			4		
2	M	52	64	1		144
	FBP			2		
3	M	56	80	2		576
	BS			4		
4	M	68	60	-8		64
	SP					
5	N	80	84	4		16
	AT					
6	N	88	88	0		0
	AA					
	P	52	84	3		102

7	AIN			2	4	
8	P	R	68	80	1	144
9	NN	R	48	88	4	160
0	D	S	64	80	1	256
1	DA	S	36	68	3	102
2	IW	T	32	64	3	102
3	YA	V	84	88	4	16
4	S	W	64	84	2	400
	N		ΣX	ΣY	Σd	Σd^2
	= 34		= 1990	= 2684	d=694	= 19588

- a. Finding the mean of x (M_x) and y (M_y)

$$M_x = \frac{\Sigma x}{N} = \frac{1990}{34} = 58.53$$

$$M_y = \frac{\Sigma y}{N} = \frac{2684}{34} = 78.94$$

Based on the calculation above, it can be seen that the mean of pretest is 58.53, and the mean of posttest is 78.94. It can be concluded that there is difference in the mean of pretest and posttest which is posttest higher than pretest score.

- b. Finding the mean "D"

$$MD = \frac{\Sigma D}{N} = \frac{694}{34} = 20.41$$

Symbol "D" here is the difference of the students' pretest and posttest score. To know the mean, researcher used formula above. The mean of D is 20.41.

- c. Degree of Freedom

$$\begin{aligned} F &= N - 1 \\ &= 34 - 1 \\ &= 33 \end{aligned}$$

N here is the total of students. To know the degree of freedom, the formula is like above and the result is 33. After finding the degree of freedom, the researcher tried to find the T-score using this formula:

d. Finding T-Score

$$\begin{aligned}
 t &= \frac{MD}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{N}}{N(N-1)}}} \\
 &= \frac{20.41}{\sqrt{\frac{19588 - \frac{(694)^2}{34}}{34(34-1)}}} \\
 &= \frac{20.41}{\sqrt{\frac{19588 - \frac{(694)^2}{34}}{34(34-1)}}} \\
 &= \frac{20.41}{\sqrt{\frac{19588 - \frac{481636}{34}}{34(33)}}} \\
 &= \frac{20.41}{\sqrt{\frac{19588 - 14165.765}{1122}}} \\
 &= \frac{20.41}{\sqrt{\frac{5422.235}{1122}}} \\
 &= \frac{20.41}{\sqrt{4.8326515}} \\
 &= \frac{20.41}{2.1983293} \\
 &= 9.285
 \end{aligned}$$

The manual calculation of T-Test also related with the SPSS calculation. The result

is:

T-Test

▶ [DataSet0]

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 PRETEST	58.53	34	17.193	2.949
POSTTEST	78.94	34	10.295	1.766

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 PRETEST & POSTTEST	34	.670	.000

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 PRETEST - POSTTEST	-20.412	12.818	2.198	-24.884	-15.939	-9.285	33	.000

From the manual calculation and the result of SPSS calculation above, it can be known that T-score is 9.285. To convince whether there is significant difference or not, so researcher did hypothesis testing in the following section:

C. Hypothesis Testing

From the data analysis above, it could be identify that:

1. When the value of T-score $>$ T-table in $d.f = 33$ with the significant level 0,05, the alternative hypothesis (H_a) is accepted and the Null Hypothesis (H_0) is rejected. It means that there is significant different score of vocabulary mastery to the VII D class students before and after being taught using Shop-n-Spree game.
2. When the value of T-score $>$ T-table in $d.f = 33$ with the significant level 0,05, the Null hypothesis (H_0) is accepted and the Alternative Hypothesis (H_a) is rejected. It means that there is no significant different score of vocabulary mastery to the VII D class students before and after being taught using Shop-n-Spree game.

The mean of total score of 34 students before being taught by using Shop-n-Spree game is (58.53). After getting treatment by using Shop-n-Spree game, the mean score of students is (79.00). It means that the students' score is increased.

Based on the statistical calculation using T-test, the researcher gives interpretation to t_{count} . First, she considered the $d.f.$ with the $d.f.$ ($34-1 = 33$). She checked the score of "t" at the significant level of 0.05. In fact, the $d.f.$ of (33) and the critical value at 0,05 significance t_{table} was (2.042).

By comparing the "t" that she got in calculation $t_{count} = (9.284)$ and the value of "t" on the $t_{table} = t_{0.05} = (2.042)$. It means that t_{count} is bigger that $t_{table} = 9.284 > 2.042$

In conclusion, T-score is greater than T-table. So, the alternative hypothesis (H_a), saying that there is significant difference between students' score before and after being taught Shop-n-Spree game is accepted and the null hypothesis (H_0) saying that there is no significant difference between students' score before and after being taught by using Shop-n-Spree game is rejected. Thus, the Shop-n-Spree game is effective for teaching vocabulary.

D. Discussion

The objective of this study is to know the effectiveness of Shop-n-Spree game toward students' vocabulary mastery of the first grade at SMP N 3 Kedungwaru in the academic year 2015/2016.

In order to getting the objective of the study, based on the research method in chapter III in this research, teaching and learning process is divided into three steps. First step is the researcher administered pretest by giving a test consists of multiple choices and matching test. It is used to know the students' vocabulary mastery before they get the treatment. Second is given treatment to the same students. The treatment here is taught by using Shop-n-Spree game. The researcher was implementing the treatment three times. In these steps, learners more enthusiastic follow teaching and learning activities. And the last step is administering posttest. In the posttest, the students are given a test that the level of difficulty of the test is same with the pretest.

In other hand, based on the results of the statistical computation using T-test, it is known that the t_{count} is bigger than t_{table} and the alternative hypothesis (H_a) is accepted, while the Null hypothesis (H_0) is rejected. It means that there is significance different score of the students' vocabulary mastery of the first grade at SMP N 3 Kedungwaru.

It means that in general; game is effective for teaching vocabulary especially for the first grade of junior high school students. In the treatment process, learners felt happy and

enthusiastic to playing moreover if they found items in that game. Games make learners willing to participate and they are happy but in fact they are studying. It is in line with Sugar's opinion (2012). He said that games are fun with a purpose, and Kirschner et al (2006) in Moursund (2007) which is with aid of teachers, learners can learn to be more reflective in such learning environments, and learning goals can be made more explicit.

Besides that, in the treatment section, researcher divided students into 6 groups. They must work together with their group to finish the mission. Students could cooperate and discuss well with their group to find the answer. This condition was in line with Sugar's opinion (2012); games improve teamwork because it brings players into teams, demonstrate the rules and roles of working together as a team, and underscore that value of team collaboration.

In addition, the indicators which must be reached are students know things in the bedroom, bathroom, and living room. The researcher as the teacher not only taught use authentic material but also used Shop-n-Spree game as the media to support it. Seven grade students were interested in game. So that it make teacher easier to convey the information. It was related with Cahyono and Mukminatien theory's (2011) about in language teaching especially teaching vocabulary and teaching grammar are better if teacher connected the material with the learners' world so that learners easier to practice and communicate.

Besides that, using game makes students more enthusiastic to follow English class. Student felt happy in a long treatment process because they interest to play the game. This condition was agreed with Harmer (2007). He stated that game can be used at any stage of a class to provide an amusing and challenging respite from other classroom activity and are especially useful at the end of a long day to send students away feeling cheerful about their English class.

In conclusion, the implementation of Shop-n-Spree game in teaching learning process gives a positive effect on the students' achievement. In other hand, with this game learners can study vocabulary with the relax feeling. For teaching, the teacher must come to the learners' world. It makes learners more comfort and not has hard feeling to learn something especially vocabulary. It also drilled learners to work as team. Because of this situation, it will make them enjoy to learn and getting the good result. So, Shop-n-Spree game is effective for teaching vocabulary of the first grade students' of SMP N 3 Kedungwaru Tulungagung.