

## The Effectiveness of Seey Android Based Game Towards The English Grammar Achievement

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### Abstract

*The research intends to examine the effectiveness of SEEY android-based game, an offline English grammar learning application. The research objectives were to discover the strength of the significant value of the effect of SEEY android-based games towards students' English grammar competence. The grammar material focus on three tenses; simple present, present progressive, and simple past. Applied quasi-experiment as research design with pre-post (test) control group design. The participants were students of the second grade of SMP Negeri 01 Garum. An experimental group was treated by applying SEEY android-based game. A control group was treated by applying the conventional method. The two groups take pretest and posttest to obtain the data. After that the data was analyzed and collected by SPSS application applied t-test formula. The outcomes of the t-test indicated a significance value (0,00) which has less than (0,05). According to the experimental group's mean score (89,28) was greater than the control group's (79,16). It was proven that SEEY android-based game as learning media has a significant effect on students' grammar achievement.*

**Keywords:** SEEY Android Based Game, Language Learning, Learning Grammar.

## 1. INTRODUCTION

Language is equipment to communicate in the form of sound and gestures. According to (Wibowo, 2001) Language is a system of symbols that are meaningful and articulate sound which are arbitrary and conventional, which is used as a means of communicating by a group of human beings to give birth to feelings and thoughts, and create a communication. Within language, there are rules and words as essential parts to create a sentence. Rules that arrange the form of word by word into sentences are known as grammar. Point to (Thornburry, 2000) concludes that "grammar is a process for making a communicator meaning clear the information is lacking." The grammar contains several rules that regulate, arrange, and combine word by word into a sentence. Thus, language assists people to communicate with each other.

Currently, grammar has been taught and learned in school. According to (Harmer, 2010) said that two approaches to teaching grammar can be applied. First, the deductive approach is carried out in a straight way, where teaching grammar is done by explaining the grammar rules. Then students give examples of sentences. Based on students' daily life, they were asked to create sentences. Second, the inductive approach is learning grammar through discussion sessions between teachers and students. In this approach, students are required to discover and explain the form of grammar after the teacher gives examples of sentences.

Grammar has one of the parts learned and taught in second-grade students in Junior High School was tense. Second-grade students in SMP Negeri 01 Garum learned three kinds of tense; simple present tense, present continuous tense, and simple past tense. Based on the information, the teacher applied two kinds of

methods as learning media to teach tense; conventional and digital media. The conventional media applied in SMP Negeri 01 Garum means that the teacher used book *When English Rings a Bell* as learning media. Besides teachers utilities smartphones, computers, and the internet in teaching process. Thus, teaching process through digital media as learning media could be applied. It was supporting the growth of technology in the education field. Point to (Oemar, 2000) explained that "technology in the education field consists of equipment that is capable used to present information, especially related to education and assessment such as television, language laboratory, and some of the media which is projected and computers."

The education field always follows the growth of technology to assist the teaching, learning, and assessment process. Thus, there is developer that creates various applications to assist students in learning a language. One of the developers was Silvi Nuril who create and developed an application for learning tense namely SEEY android-based game. (Silvi, 2022)states that SEEY android-based game is an offline application for learning tense. The SEEY android-based game provides material and practices session about three tenses also include setting. It is a kind of game that is similar to Mario Bros. Basically it was an offline game. Thus it was accessible to play by students without an internet signal. The SEEY android-based game was one of the good applications to choose as a learning media. It was also proven by Silvi N's research that SEEY android-based game was appropriately used as digital learning media.

Based on the information above researcher is interested to apply digital media to teach tense, especially SEEY android-based games. The researcher apply SEEY android-based game applications in order to assist enhance students' grammar achievement. Thus the focus of this research was to know the effect of SEEY android-based games towards students' grammar achievement.

## 2. RESEARCH METHODOLOGY

According to (Cresswell, 2012) an experimental design is the traditional approach to conducting quantitative research. The research applied a quasi-experimental design and quantitative approach. The research took data from the test. The quasi-experimental design with pretest post-test control design. The research was implemented in second-grade students of SMP Negeri 01 Garum in the 2021/2022 academic year. The participants of this research were students in class VIII which consists of 310 students. The participants were chosen by the researcher based on the number of students amount that equal and which class has a smartphone that is compatible to operate the SEEY android-based game. The result of the sampling was students of class VIII-A and class VIII-C. The students in class VIII-A consist of 32 students as the experimental group. The teaching and learning process in the experimental group applied the SEEY android-based game as learning media. The students in class VIII-C consist of 32 students as a control group. The teaching and learning process in the control group was conventional media. The quantitative approach has 2 variables: independent and dependent. The independent variable of this research was the effect of using SEEY android-based

games. The dependent variable was learning grammar achievement. Both of the participants were given tests (pre-test and post-test) to obtain the data. Before being used as a pre-test and post-test, the test was tested to measure the validity and reliability by using SPSS. Also, an independent sample t-test was analyzed and measure used SPSS to discover the proposed hypothesis as follows:  $H_0$ = there is no effect of using the SEEY android based-game for students' grammar achievement.  $H_a$ = there is effect of using the SEEY android based-game for students' grammar achievement.

### 3. RESULT AND DISCUSSION

The research instrument that was used to obtain the data was a test. First of all the test measured the validity and reliability by using SPSS. The validity test of instruments implemented by testing *Product Moment Pearson Correlation*. The basis for making the decision validity test was comparing the *r-value* and *r-table*. If N was 60, then the *r-table* was 0,254 (the significance level 5%). The instruments were valid if *r-value* > *r-table*.

Table 3.1 Validity

Total	Pearson Correlation	.345**	.409**	.408**	.416**	.357**	.371**	.462**	.449**	.434**	.378**
	Sig. (2-tailed)	0,007	0,001	0,001	0,001	0,005	0,003	0,000	0,000	0,001	0,003
	N	60	60	60	60	60	60	60	60	60	60

Reliability is a method used to measure the consistency of an instrument on different occasions. According to (Dian Ayu, n.d.) reliability is something that refers to the consistency of scores achieved by the same person when they are tested with the same test on different occasions. To admit if the test was reliable, the test was tried out on another subject before conducting to sample of the research. According to (Sahid, n.d.) the instruments was reliable if the value of *Guttman Split-Half Coefficient* > *r-table* (0,80). Thus, predicated on the table below, shows that the *Guttman Split-Half Coefficient* was 0,948. Therefore *t-value* 0,948 > *t-table* 0,80 then the result was reliable.

Table 3.2 reliability

Reliability Statistics						
Cronbach's Alpha	Part 1	Value	0,738			
		N of Items	23 <sup>a</sup>			
	Part 2	Value	0,747			
		N of Items	22 <sup>b</sup>			
	Total N of Items		45			
Correlation Between Forms			0,901			
Spearman-Brown Coefficient	Equal Length		0,948			
	Unequal Length		0,948			
Guttman Split-Half Coefficient			0,948			
a. The items are: Soal1, Soal2, Soal3, Soal4, Soal5, Soal6, Soal7, Soal8, Soal9, Soal10, Soal11, Soal12, Soal13, Soal14, Soal15, Soal16, Soal17, Soal18, Soal19, Soal20, Soal21, Soal22, Soal23.						
b. The items are: Soal23, Soal24, Soal25, Soal26, Soal27, Soal28, Soal29, Soal30, Soal31, Soal32, Soal33, Soal34, Soal35, Soal36, Soal37, Soal38, Soal39, Soal40, Soal41, Soal42, Soal43, Soal44, Soal45.						

The result of the validity and reliability test was valid and reliable, the test was used to obtain the data and assess the students' grammar achievement scores. The number of participants, minimum scores, maximum scores, mean scores, and standard deviation can be seen in descriptive statistics. Here are the result of the descriptive statistics of the experimental and control groups as follows:

Table 3.3 Descriptive Statics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Experiment	32	40	80	55,75	11,077
Post-Test Experiment	32	80	100	89,28	5,182
Pre-Test Control	32	40	80	55,19	11,332
Post-Test Control	32	70	93	79,16	6,294

The total of participants in each group was 32 students. The mean score of the pre-test experiment and control group was 55,75 and 55,19. After getting treatment, the mean score of the post-test experiment and control group was 89,28 and 79,16. After that, the researcher applied *Kolmogorov-Smirnov* to discover whether the gained data was normal distribution or not. The normality test can be said normal distribution if the *p-value* > *standard significance* (0,05). Based on the table below the *p-value* of the pre-test and post-test experiment groups was 0,200 and 0,166. The *p-value* of the pre-test and post-test of the control groups was 0,200 and 0,947. All the *p-value* of both groups was higher than the standard significance, which signifies that test was a normal distribution.

Table 3.4 Test of Normality

Tests of Normality							
Kelas		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Belajar Siswa	Pre-Test Experiment	0,111	32	.200 <sup>*</sup>	0,950	32	0,149
	Post-Test Experiment	0,132	32	0,166	0,953	32	0,180
	Pre-Test Control	0,124	32	.200 <sup>*</sup>	0,935	32	0,056
	Post-Test Control	0,134	32	0,152	0,947	32	0,121

Besides normality, the data also tested the homogeneity to discover whether the gained data has homogeneous variance or not. The data can be said homogenous if the significance value is bigger than 0,05. Point to the mean significance value of data was 0,291. It signifies that the significance value is bigger than 0,05. Thus, it signifies that the data has a homogenous variance.

Table 3.5 Test of Homogeneity of Variance

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Hasil Belajar Siswa	Based on Mean	1,132	1	62	0,291
	Based on Median	1,104	1	62	0,298
	Based on Median and with adjusted df	1,104	1	60,316	0,298
	Based on trimmed mean	1,163	1	62	0,285

Point to the hypothesis of the research, the student's score of the post-test between the experiment and control group was analyzed and measure used SPSS. The mean score post-test of the experiment and control group was 89,28 and 79,16. It showed that there are differences in mean scores as much as 10,12. It proved that the result of the post-test experiment group was bigger than the control group. The descriptive statistics of the post-test between the experiment and control group are as follows:

Table 3.6 Group Statistics

Group Statistics					
Kelas		N	Mean	Std. Deviation	Std. Error Mean
Hasil Belajar Siswa	Post-Test Experiment	32	89,28	5,182	0,916
	Post-Test Control	32	79,16	6,294	1,113

Point to the result of the independent samples test, the value of Sig. Levene's Test for Equality of Variances was  $0,291 > 0,05$ . It interpreted that the data variance between the post-test of the experiment and the control group was homogenous or same. Based on the value of *df* (62) and significance value (0,05) it was known that a number of *t-table* was 1,671. Based on the hypothesis

of research as follows:  $H_0$  states that there is no effect of using the SEEY android based-game for students' grammar achievement and  $H_a$  states that there is effect of using the SEEY android based-game for students' grammar achievement. Moreover, the rules of deciding comparison between t-value and t-table in an independent sample test as follows: (1) if t-value < t-table then  $H_0$  was accepted and  $H_a$  was rejected, (2) if t-value > t-table then  $H_0$  was rejected and  $H_a$  was accepted. The calculation data show that t-value (7,025) > t-table (1,671). Thus, the result of the comparison of both groups was there is effect of using the SEEY android based-game for students' grammar achievement. It showed the calculation of the independent samples test below:

Table 3.7 Independent Samples Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interval of the	
Hasil Belajar Siswa	Equal variances assumed	1,132	0,291	7,025	62	0,000	10,125	1,441	7,244	13,006
	Equal variances not assumed			7,025	59,795	0,000	10,125	1,441	7,242	13,008

Yet the table above explained the significance value of as much 0,000. Point to the basis interpretation of independent sample t-test sig. (2-tailed) as follows: (1) if the value of sig. (2-tailed) > 0,05 then  $H_0$  is accepted and  $H_a$  is rejected and (2) if the value of sig. (2-tailed) < 0,05 then  $H_0$  is rejected and  $H_a$  is accepted. It signifies that the significance value is smaller than 0,05. The result was  $H_0$  is rejected and  $H_a$  is accepted. Therefore, the result of the t-test signifies that there is effect of using the SEEY android based-game for students' grammar achievement.

#### 4. CONCLUSION

The growth of technology was moving fast and the application of learning media which more variations and applicable. The SEEY android-based game as a learning media offline application which applicable by smartphone. The application of SEEY show better result based on the data within Silvi's research. The result of applying of SEEY android-based game enhance students' grammar achievement. The application helps students to easily learning grammar.

The analysis and calculation of data by using SPSS of independent sample test, it is concluded that there is a significant effect of using SEEY android based-game as learning media to enhance students' grammar



achievement. The outcomes of the independent sample test of the mean score of the experiment and control groups were 89,28 and 79,16. It shows a range as much 10,12. Yet the significance value between both groups was smaller than 0,05. It signifies that the analysis and calculation represent the effectiveness of the SEEY android based-game applied as learning media to enhance students' grammar achievement.

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