

The correlation between students' activity in playing English video games and student's vocabulary mastery at SMAN 1 Bandar Lampung

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ABSTRACT

The primary goals of this reasearch are to find out the correlation between students' activity in playing English video games and students' vocabulary mastery. This research was conducted in SMAN 1 Bandar Lampung. The subject were 36 students of XI MIPA 2 as the subject of the research. Questionnaires and vocabulary test were used to collect the data. This research was using correlation through the application of quantitative methods by collecting the data from the test. The result of questionnaires showed that there were 20 students who had high level of playing English video games, 13 students had medium and 3 students had low. Meanwhile, the result of the vocabulary test showed that there were 2 students got outstanding level of vocabulary mastery. 18 students got good, 10 students got satisfactory, and 6 students got very weak. According to the result of the analysis and statistical calculation it is found that r_{xy} is 0.604, which means there is significant correlation between students' activity in playing English video games and students' vocabulary mastery.

Key Word : *Correlation, Video Games, and Vocabulary Mastery*

I. INTRODUCTION

Language is one of the most important things in communication and it is used as a tool of communication among the nations in all the world. In oxford learner's pocket dictionary (2008) defined as language is system of communication in speech and writing used by people of a particular country. We use it to communicate with each other, to solve problems, to express emotions, idea and everything in their mind. In other words, language is one of the most important to help about our activities of life. Language is also a communication of thoughts and feelings through a system of arbitrary signals such as sounds, gestures, or written symbols

In Indonesia, English is a foreign language. It is not confused that TEFL (Teaching English as Foreign Language) is presented as a practice using them as the basis for written and spoken communication (Richard, 2002). We also know that English is an international language that is used almost all of the countries in the world, as an international language it is used in international activities, such as in the airport. These dimensions are assumed to be significant contributors that determine the success or failure in acquiring English language learning. In learning English there are three components, include pronunciation, grammar and vocabulary.

Vocabulary is one important aspect in learning a foreign language. With a limited vocabulary anyone will also have a limited understanding in terms of speaking, reading, listening, and writing. It is true that it might be impossible to learn a language without mastering vocabulary. Mastering vocabulary will help them to improve their English knowledge, as it is mentioned by Jennings (1978): "If you already have an interest in words (vocabulary) using them can improve your reading, writing, talking, and thinking". From the quotation above, we can take a reference that the basic component, which must be mastered by them to get a success in learning English is vocabulary. They will find some difficulties in their learning process without mastering it, since most learning activities such as listening, reading, thinking and talking need a large and solid vocabulary. As it is stated by Bennet (1991) "Yet everyone, especially the English learners, need a large vocabulary to succeed in their learning process because reading and listening are the ways they learn". As it is mentioned by Canale and Swain in Jack Richard and W. Schmidt (1983) "Communicative competence was understood as the underlying system of knowledge and skill required for communication, e.g. knowledge of vocabulary and skill in using the sociolinguistics of convention for a given language". From the quotation above, we know that mastery of the vocabulary of a foreign language is the most required thing for communication. Nasr (1975) stated that language is used to communicate ideas and experiences and vocabulary is an element in a language that expresses units in our experiences.

Realizing the importance of English in our country, many people in Indonesia are learning the language. They learn it for many different purposes such as business, science, technology, and communication and also for education. Besides having different purposes in learning the language, people also have different sources in learning it. Most of them learn the language in formal education such as: schools, colleges and universities. In our country, English has been taught as a compulsory subject since the students are in the Junior High School until the University. It is also taught in some Elementary Schools and Kindergartens in Indonesia as local content from now on. In addition to learning the language in formal education, people also learn it in non-formal education. English courses and private lessons are the examples of non-formal education institutions existing in our country. People can choose one of them that are suitable with their purpose and funds. Although they are learning the language from different sources, they have a same basic wish in their learning process that they want to get a success on it in realizing their wish; they use some media that can help them in the learning process. These media can be books, magazines, newspapers, cassettes, radios and even video games.

The phenomenon of video games now is booming in this world from the developed countries until developing countries especially Indonesia, from a big city until a rural area had been known video games. A video game is an electronic game that involves interaction with a user interface or input device to generate visual feedback for a player. Nicolas (2005) says that "A video game is a game which we play thanks to an audiovisual apparatus and which can be based on a story."

Regarding language teaching and learning process, as Gee (2005), believes, games are understood as conceptual models working across formal and informal learning contexts. In language teaching, according to Warschauer and Healey (1998, as cited in Sørensen & Meyer, 2007), games have often been utilized to increase motivation and authentic communicative practices, since games have been conceptualized as an enjoyable factor in language learning. They create a fun environment in which learners and even the teacher become more interested in learning and teaching process. In addition to this, games have been found as a serious and pervasive element for providing stimulation and simulation in educational settings.

Yip and Kwan (2006) in their study entitled "Online vocabulary games as a tool for teaching and learning English vocabulary" found that learners playing online vocabulary games tend to learn more appropriately and could retain the new words for a longer period of time and retrieve more words compared to those who aren't provided with vocabulary games. Vocabulary instruction is a long-time process. If the games are fun, relaxing, motivating and confidence boosting, the learners' interest will increase. To become sure that learning continues, it is required to see if the games provide the learners with continuous motivation. Although excitement is effective in motivating learners to play a game again, it is important to become sure that the excitement element does not negatively influence the learning objectives.

Dealing with vocabulary mastery, English learners cannot develop other language elements, pronunciation, grammar, and spelling without vocabulary. Vocabulary mastery refers to the number of words a person knows. Vocabulary is very important for students. Students are expected to master reading, writing, speaking, and listening skills. Vocabulary can help students to gain an adequate understanding of a large number of words. The term mastery is not limited to recognizing the meaning of certain words. In other words, it is more accurately defined as 'knowing a word' because students are said to have good vocabulary mastery if they can recognize its meaning also know the form, grammar, collocation, meaning, and word formation. Vocabulary mastery can be interpreted as several vocabulary words or words in the memory of users or students'.

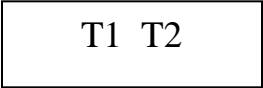
As explained above, vocabulary is important in learning English. Students must increasingly master vocabulary because lack of vocabulary often brings problems for English learners. When they are writing something in English, sometimes they get into trouble because they do not know how to express their ideas in the written language. It cannot be denied that vocabulary is one of the important things in English communication. In this case, the researcher wants to see whether students who play video games have an interest in learning English vocabulary and know vocabulary more than students who do not play video games. So, he conducted this research.

II. METHODS

This research is a quantitative study to determine the correlation between students' activity in playing English video games and their vocabulary mastery. To analyze the data, he used the correlation study of Ex facto design. The researcher only collects the data to see the correlation between two variables, so there will be no treatment. (Setiyadi, 2018)

To find out students' activity in playing video games, fifteen questionnaires will be given related to students' activity in learning English from video game. For vocabulary mastery, vocabulary size test will be given as many as sixty items in which there will be 2000-3000 words level. The design of the research as follows :

T1 = Video Games
T2 = Vocabulary Mastery



The population of this research was the second year students of the SMA Negeri 1 Bandar Lampung in the academic year 2020/2021. The samples for the all second year students of the SMA Negeri 1 Bandar Lampung. The total samples used in this study were 36 students taken from the population by applying cluster random sampling technique. Arikunto (2002) says that “If the population is 100 or less, it is better to take the whole population as the sample, if the population is more than 100 respondents, the researcher can take 10-15 % or 20-25 % or more than 25% of the population based on the capability of a researcher” (Translated from Metode Penelitian, 2002). In this research, the researcher will use one class as a sample, which is selected by using random sampling method.

In this research, the researcher used two kinds of tests. They are questionnaire and vocabulary tests. The questionnaire in this research is used to measure the students' activity in playing English video games. In this research, the writer used a rating scale form of questionnaire i.e. a statement followed by columns indicating always, often, sometimes and never. The researcher adapting the questionnaire item from The Effects of Video Game Play on Academic Performance by Jancee Wright (2011) and Video Games as Motivators of English Vocabulary Acquisition and Reading by Audrey and Sonya (2019). To deal with vocabulary mastery test, the researcher will use the test of vocabulary size Receptive Vocabulary Level Test (RVLT) which was originally created by Notion (1983; 1990), revised and expanded by Schmitt and Clapham (2001) has been used by the researcher. It is considered that RVLT is as a 'nearly' standard test since there is no truly standard test vocabulary. Normally, in the curriculum, there is a core competence, basic competence and goal which define that the high school students must achieve 2000-3000 words of vocabulary. It is in line with Senior High School English Curriculum Guidelines (1996) that senior high school students are expected to learn 2,800 words.

The researcher made the steps after conducting the research using tests; the researcher compared the students' vocabulary mastery scores and students' reading comprehension scores at the eleventh-grade students of SMA N 1 Bandar Lampung. The data obtained has been analyzed by using percentage analysis to know the students' ability in using reading comprehension and vocabulary in individual score. The test results are in the form of scores or interval data. After obtaining these results, the researcher would analyze the relationship between students' vocabulary mastery and students' reading comprehension.

III. RESULTS AND DISCUSSIONS

Results

The result of students' vocabulary mastery and students' reading comprehension taken from students' answer. According to the answer, the result of the tests shows that the students has variety scores. The highest score of questionnaire was 73 and the lowest score was 38. While the highest scores of vocabulary test was 93 and the lowest score was 48.

The main goal of this study is to find out whether or not a positive correlation between students' activity in playing English video games and their vocabulary mastery and the level of vocabulary mastery of the eleventh grade students of SMA N 1 Bandar Lampung in the academic year 2020/2021. The researcher used the score of students' vocabulary test and the result from the questionnaire. Then, the data were input to SPSS and were analyze by using Pearson product moment correlation to see correlation between student's activity in playing English video games and student's vocabulary mastery. The answer is presented below.

Correlations

		vocabtest	Kuisioner
vocabtest	Pearson Correlation	1	.604**
	Sig. (2-tailed)		.000
	N	36	36
kuisioner	Pearson Correlation	.604**	1
	Sig. (2-tailed)	.000	
	N	36	36

In the table above, it can be proved that there is positive correlation between students' activity in playing english video games and their vocabulary mastery of second year students in SMAN 1 Bandar Lampung.

To facilitate the measurement of students' vocabulary mastery, the raw scores are converted in the standard scores using the percentage correction formula. To see the mean score of vocabulary mastery, the researcher calculated the mean score of the vocabulary test and get the result of the students' average percentage of vocabulary. The result of the students' average percentage of vocabulary was :

$$X = \frac{R}{nxt} \times 100\%$$

$$X = \frac{754}{36 \times 30} \times 100\%$$

$$X = \frac{754}{1080} \times 100\%$$

$$X = 69$$

To judge the students' grade and the level of the vocabulary mastery, researcher used the student performance (Depdikbud, 2004), for the students' scores. In accordance with the categorization, the student's achievement for the 11 MIPA 2 students of SMAN 1 Bandar Lampung is classified as good criteria.

Discussions

The finding indicates that there was positive correlation between students' activity in playing English video games and students' vocabulary mastery. It can be said that video games is one of the important factor in students' vocabulary mastery. It was strengthened by Schmitz (2010) who states that frequency of input is an important factor for language acquisition, which indicates that computer games containing a large quantity of words could aid in vocabulary acquisition. Vocabulary is a key component of learning English. If students know the meaning of a word, they will be able to read and consider it within a sentence.

Thus, students who have high activity in playing video games they get the better score in vocabulary test too. However, there are some students that still have low score in vocabulary. Students with low score in

vocabulary usually had low activity in playing video games. It means that there are positive correlation between playing video games and student's vocabulary mastery. The results correlate with Schmitz' (2010) thoughts about how frequency of input may help vocabulary acquisition, as the participants who played games moderately frequently or more had higher scores on all word levels, and therefore likely received larger amounts of language input compared to the infrequent gamers. Additionally, all of the video game-playing participants reported that they communicated in English whilst they were playing video games. This may have caused the video game-playing students to acquire vocabulary through interacting with other players.

Besides, to investigate whether there was a significant correlation between students' activity in playing English video games and students' vocabulary mastery, the researcher had tested their activity in playing video games and their vocabulary mastery. It can be seen from the result shows that $r_{xy} = 0.604$ with $N = 36$ ($df = N - 2 = 34$) are significant. It means H_0 was accepted that there was a significant correlation study between students' activity in playing English video games and students' vocabulary mastery

According to Depdikbud(2004) on students performance level, the level of vocabulary mastery of second year students of SMAN 1 Bandar Lampung is classified as good criteria. Additionally, according to Nation's (2001) interpretation framework,the students in the current study knew sufficient words from 2000 and 3000 word. This finding is also consistent with the study done by Ho-Chuen (1997). He found that the participants in his study knew sufficient words in 2000 and 3000 word level but they needed to learn more vocabularies from 5000 word level. In the present study, the participants were second year students at SMAN 1 Bandar Lampung; therefore, it is very important for the students to have sufficient academic word level in order to be able to have a successful in language learning (Nation, 2001).

IV. CONCLUSIONS AND SUGGESTIONS

Conclusions

The objective of this research was to find out whether there was a significant correlation of student's activity in playing English video games and their vocabulary mastery or not. In relation to results and discussion of the study, it is concluded that there is a significant correlation between student's activity in playing English video games and their vocabulary mastery. Statistically, it could be seen from the gain of student's activity in playing video games and their vocabulary mastery scores. Students who have high activity in playing video games they get the better score in vocabulary test too. However, there are some students that still have low score in vocabulary. Students with low score in vocabulary usually get low activity score in playing video games too. It proves that video games influences their vocabulary mastery. Video games can be effective in vocabulary acquisition, due to creating an interactive and motivating context where learners can easily and subconsciously share their information, and also due to the requirements and obligations encountered by them during playing, are effective in vocabulary acquisition. Students acquire the new words via the games because they are willing to be the winner. They compete and cooperate with each other in an enjoyable environment. For the vocabulary mastery level of second year students SMAN 1 Bandar Lampung academic year 2020/2021, the vocabulary achievement of second year students of SMA N 1 Bandar Lampung is in good criteria.

Suggestions

In reference with the conclusion, the researcher gives some suggestions. The results of this study have implications for designers of educational video games, teachers, and students. Language teachers are advised to use video games in their classrooms, especially for vocabulary building. Students could use a variety of media to autonomously learn a foreign language, and as video games continue to gain popularity, it seems likely that learners will import or download foreign-language video games, using video games as an effective media for self study. Further research of similar types should be done with greater population in order to gain a wider generalization. It is also suggested to extend the number of participant or student to get result that is more accurate and gain a wider generalization.

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