

# INVESTIGATING STUDENTS' ENGLISH READING COMPREHENSION DIFFERENCES AMONG GAMER STUDENTS AND NON-GAMER STUDENTS

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## Abstract

In this era, several studies have interested the effect of playing video games to conduct their recent study. Playing video games convincingly show the benefits for people who immersed with video games such as improve students' English proficiency especially in reading comprehension. This study aims at investigating does video games affects students who love playing video games in reading comprehension on Indonesian EFL students of SMA Negeri 3 Jombang. The researcher used quantitative which ex-post facto research to conduct the phenomenon. Two research groups were determined, which were gamer students and non-gamer students. The sample of this study consisted of 60 EFL students, which were 30 gamer students and 30 non-gamer students. The researcher used closed-ended questionnaire instrument to classify the students into two groups. The data of the study was the score of the students reading comprehension score that collected through reading comprehension test as the second instrument in this research. The result showed that the Sig. (2-tailed) is 0.128 which is more than 0.05. it means that  $H_0$  is accepted and  $H_a$  is rejected which means that there are no differences of students' English reading comprehension score among gamers and non-gamers students in SMA Negeri 3 Jombang. Based on the finding, the researcher suggest to the future researcher to conduct the same line as this research to conducting the subject which has smaller grade considering the factors that affect students score.

Keywords: video games, gamer, reading comprehension, RPG (Role-Playing game)

## Abstrak

Di era sekarang, beberapa penelitian tertarik akan mengadakan pengaruh bermain video games pada penelitian sekarang. Bermain video games diyakini mempunyai keuntungan kepada orang-orang yang mendalami bermain video games seperti meningkatkan kecapakan siswa di Bahasa Inggris seperti pemahaman membaca. Tujuan penelitian ini ke investigasi apakah video games mempengaruhi siswa yang suka bermain video games di pemahaman membaca kepada pelajar Indonesia asing berbahasa Inggris di SMA Negeri 3 Jombang. Penelitian ini menggunakan kualitatif yaitu ex-post facto untuk menggali fenomena tersebut. Dua group penelitian telah ditentukan, yaitu pelajar bermain video games dan pelajar tidak bermain video games. Sampel pada penelitian ini adalah 60 pejalara asing bahasa Inggris terdiri dari 30 pelajar bermain video games dan 30 pelajar tidak bermain games. Penelitian ini menggunakan kuesioner tertutup untuk menggolongkan pelajar menjadi dua group. Penelitian data ini menggunakan skor pemahaman membaca pelajar dengan memberikan tes pemahaman membaca sebagai instrumen kedua pada penelitian. Hasil dari Sig. (2-tailed) is 0.128 yaitu lebih dari 0.05, berarti  $H_0$  diterima dan  $H_a$  ditolak berarti tidak ada perbedaan skor pemahaman membaca

pelajar antara pelajar bermain game dan pelajar yang tidak bermain game di SMA Negeri 3 Jombang. Berdasarkan temuan, peneliti menyarankan untuk peneliti dimasa depan yang mempunyai kesamaan dengan penelitian ini untuk melakukan sebuah penelitian dengan menurunkan tingkatan sekolah dengan mengingat factor yang mempengaruhi skor pelajar

Kata Kunci: video games, gamer, pemahaman membaca, RPG (Role-Playing Game)

## **1. Introduction**

In this era, technology has become the helping tool in human life. Technology has a function as learning tool in education for improving students' interest in teaching and learning environment. Some learners found the way to enhance their ability in mastering English language in different ways, either from teaching and learning process and also in entertainment media. Entertainment is becoming trending activities such as listening to the music, watch movies, playing video games, etc. Video game is one of the most trending entertainment media which dramatically increased since 1990s until now (Berger, 2002). As in this case, it can be used the media in learning language. Unfortunately, the common stereotype among the people stated that video games are made for entertainment only (Shaffer, Halverson, Squire, & Gee, 2005), this common case also happens in Indonesia, common parents among those students stated that video game is categorized as something that creates unproductive habits, and killing time only, in which there is no benefit in playing video games is the basic reason why researcher conducts this problem into this research.

In the recent past, especially in the last decades, video games have been gaining popularity not only in entertainment but also as an object of interest in academic research. As such, learners are increasingly using video games to enhance intellectual capabilities and cognitive capacity, increasing the ability of knowledge acquisition and retention. Understandably, the advent of information technology, and the use of video games that are designed for education purposes, has played an important role in the promotion of effective learning. In this era, video games are now available in a variety of forms, being connected to TV game consoles, to desktop applications, it could be in website games portals or to specific servers on the Internet. They can be played on consoles or we know as PlayStation, Xbox, Nintendo Switch, etc, tablets or mobile phones, either by a single player, or with a few partners (multiplayer) can be done with those media.

Moreover, videogames, as television, have the ability to create enjoyment and to generate pleasure (Fiske, 1986) by ensuring a status for the player, giving the player or the EFL students with power through the ability that they have learnt by play video games in console game or PCs. Video games now are the common hobby in the environment start from kids, students, and adults like to spend their time more than an hour with video games. Video games also are activity without being forced by any responsibility. Video games advantages which has function as the facilitation of the communication. It is believed that facilitation of communication could help to increase the students' proficiency of non-native speaker (Postic, 2017). Video games are designed to set up certain goals for the gamer and designed that allow player to construct their own goal but only within the rule that given by the game (Gee, 2008).

In addition, there are several types and several genres in video games. (Grace, 2005) Distinguishes game type as the description of the game-play such as, action (*Metal Gear Solid*), Adventure (*The Walking Dead*), Puzzle (*Line: Bubble*), Role-Play (*Monster Hunter: World*), Simulation (*Flight Simulator*), Strategy (*Civilization*). And the game genre as a description of the narrative content in video games, for the example, Drama, Crime, Fantasy, Horror, Mystery, Science Fiction, War and Espionage, Western/Eastern/Frontier. While, in this study, the researcher conduct the research based on the EFL students who love playing RPGs (Role-play Games).

Role-Playing Games (RPGs) form one of the primary genres of games, and is possibly one of the most widely varying game forms around. Furthermore, RPGs have been designed for or ported between every existing hardware platform produced for games, in addition to tabletop and live-action variations. RPGs have strong variation across and within formats, the focus on providing the player with a character that grows and develops through play experience as well as on storytelling, provide a unique opportunity to examine many of the pressing questions of game studies. Therefore, in recent years, RPGs have been the subject of rapidly increasing interest in the game studies community, from some of viewpoints including design, development, culture, sociology, psychology and interactive storytelling (Lindley, 2005).

By doing so, the students are able to receive the information on what constitutes target-like use or grammatical that given by GM (Game Master) of RPGs. For the example, in the video game of *The Last of Us* there is a short of sentence which spoken by the character in video games such as "endure and survive". The sentence contains the main rule how to complete the mission

of the game. In this case, students are able to develop their English language for daily life by understanding the meaning of the sentence through video games and understanding the instruction that given by video games which displayed on your screen monitor, it means there is an interaction in RPG game-play between EFL students and NPC.

Based on explanation above, the researcher tries to investigate the effect of video games towards students' English reading comprehension which focus on comparing students score and conducting this study by investigating the gamer students and non-gamer students which is the gap among the previous studies. Moreover, the study aims to investigate the students' English reading comprehension between gamer students and non-gamer students which video games give effect to students reading score or video games did not give effect to the students. However, investigating the relationship between video games and students' score on reading comprehension has not received much attention in current literature. In this case, the researcher found opportunities to focus on investigating the relationship between video games and student's reading comprehension among gamer students and non-gamer students in senior high school students. The researcher compare students reading comprehension score in general to know whether playing RPG increase gamer students' English proficiency in general or not.

## **2. Research Method**

In this paper, the researcher uses quantitative research that is ex-post facto research (Ary, 2010) has purpose to investigate cause-and-effect relationship between independent and dependent variables. Ex-post facto design involves the independent variable which occurred by dependent variable and the researcher is faced with the problem of how to determine the cause and effect that is being observed (Ary, 2010). The study involves two types of EFL students in SMA Negeri 3 Jombang. In addition, the researcher used Ex-post facto design because the researcher tries to conduct this phenomenon to know does video game affect the students who love playing video games have different reading comprehension score compare with students non-gamer in SMA Negeri 3 Jombang.

The population in this research were focus on 12<sup>th</sup> grade students as much 339 students in SMA Negeri 3 Jombang which categorized into gamers and non-gamer students, totalling all of the students in SMA Negeri 3 Jombang is 1020 students. The researcher focused on 12<sup>th</sup> grade students because the researcher was observed SMA Negeri 3 Jombang before taking the population. The result of the observation showed that 12<sup>th</sup> grade students have higher population

students who addicted with RPG in each class compare to 11<sup>th</sup> grade students only have 2-4 students who addicted with RPG in each class which 12<sup>th</sup> grade students have higher population that addicted with video games.

The researcher uses two instruments to collect the variables which are independent variable and dependent variable. The independent variable, the researcher involves EFL senior high school students in SMA Negeri 3 Jombang. For the independent variable, the researcher uses closed-ended questionnaire to collect the independent variable which gamer students and non-gamer students. During this pandemic of COVID-19, the researcher defines the EFL students by using *Google forms* as a tool for helping of this research to classify which are the gamer students and non-gamer students.

The study involved Indonesian EFL Senior high school students' reading comprehension test as the dependent variable. The focus on conducting this research was measuring the reading comprehension among gamer students and non-gamer students in SMA Negeri 3 Jombang. Measuring the variable, reading comprehension test used as the instrument of the research which as the purpose for answering the research problem of this research. More specifically, reading passage test was used on this research which constructed for EFL students in SMA Negeri 3 Jombang XII grade. Regarding to the scoring, the researcher arranged the blueprint for the reading comprehension test which will be given for the EFL, also micro-skills and macro-skills by (Brown H. D., 2003) theory will be used to create the reading comprehension test, this is to minimize confounding factor for collecting the data.

### **3. Result and Discussion**

In this research, the researcher conducted in senior high school students which twelve grade students in SMA Negeri 3 Jombang with the total sample is 60 students; they are 30 gamer students and 30 non-gamer students. This study involved EFL senior high school students' reading comprehension as the dependent variable. Moreover, the data of this study is students' reading comprehension score which is analysed by using IBM SPSS Statistics. After categorizing the students based on questionnaire which gamer students and non-gamer students, the researcher compared the result of the reading comprehension test between gamer students and non-gamer students were done with following result.

**Table 4.1**

	group	N	Mean	Std. Deviation	Std. Error Mean
score	1	30	81.87	5.303	.968
	2	30	84.13	6.044	1.104

According to the table 4.1 the mean in group 1 which is gamer students is 81.87 (N=30) which is has lower mean than group 2 which is non-gamer students is 84.13 (N=30). From the information above, it can be seen that non-gamer students have the higher mean reading comprehension score compare to gamer students. For further analysis, Independent sample T Test used to analyse this research, it can be seen on the following chapter.

**Table 4.2 Testing Hypothesis**

		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	95% Confidence Interval of the Difference	
									Lower	Upper
score	Equal variances assumed	.140	.710	-1.544	58	.128	-2.267	1.468	-5.205	.672
	Equal variances not assumed			-1.544	57.034	.128	-2.267	1.468	-5.206	.673

Based on the table 4.2 above, the result of the test statistic shows that Sig. (2-tailed) is 0.128 which is more than 0.05. it means that H0 is accepted and Ha is rejected which means that there are no differences of students' English reading comprehension score among gamers and non-gamers students in SMA Negeri 3 Jombang. Overall, it can be concluded from the explanation above video games does not affect students' English skills in teaching and learning process.

### 3.2 Discussion

In this researcher, the objective is to investigate the difference of reading comprehension students who addicted playing RPG and students do not addicted to RPG on 12 grade EFL senior high school in SMA Negeri 3 Jombang. There were two instruments on this research: questionnaire and reading comprehension test. Moreover, there will be an effect of the students'

reading comprehension when there is difference of students' English reading comprehension score among gamers and non-gamers students by EFL students. The fact, the finding of this study shows that in the Sig, (2-tailed) is 0.128 which  $0.128 > 0.05$ , it means there is no statistically significant difference reading comprehension among gamer students and non-gamer students on Indonesian EFL senior high school after being given reading comprehension test.

However, the significant difference did not exist in present study may be attributed to many other reasons. Firstly, it comes from each student's intelligence which has greater impact on reading comprehension. Secondly, the reading comprehension test does not implied to the gamer students, this research using reading comprehension in general to compare the gamer students and non-gamer students. Thus, this also becomes the weakness of this study which video games do not affect students' reading comprehension compare to previous studies which conducted the research not during this pandemic, it may occur students' reading skill. Based on the result of the reading comprehension test, most 50% gamer students have failed on number 25-30 which means at that factor, gamer students still difficult on macro skill, described events, ideas, etc. infer links and connection between events, deduce causes and effects, and detect such relations as a main idea, supporting idea, new information, given information which.

Concerning to the finding of this research, the researcher reveals that there is no significant effect of reading comprehension on SMA Negeri 3 Jombang EFL students based on the previous chapter. The total sample of this research was 60 students. They were 30 gamer students and 30 non-gamer students. The mean in group 2 is 84.13 which mean has higher mean compare to the group 1. It is showed on the result of the test statistic by using SPSS-22. It shows that Sig. (2-tailed) is 0.128 which is higher than 0.05. It means the null hypothesis was accepted. Based on the result of the hypothesis test, since the video games refers to the significant

difference between the mean of reading comprehension score of the group 1 and group 2. It is believed that there is no difference of students' English reading comprehension score among gamers and non-gamers students in SMA Negeri 3 Jombang which means  $H_0$  is accepted and  $H_a$  is rejected.

#### **4. Conclusion**

Concerning the statements of the problem in this research, this research aims is to investigate the video games RPG affects students reading comprehension for students who love playing video games RPG (Role-Play Games). It can be concluded in previous chapter that there is no effect difference of students' English reading comprehension score among gamers and non-gamers students in SMA Negeri 3 Jombang. It is showed in previous chapter which is interpreted by SPSS 22 by using independent T Test. Basically, the null hypothesis was accepted and the alternative hypothesis was rejected. The Sig. (2-tailed) table is 0.128 which is higher than 0.05. In conclusion, being gamers or students who love playing video games does not guarantee to have higher score at reading comprehension. There are many factors that non-gamer students have higher score than gamer students such as, studying frequency, level of intelligence and etc. Since video games affect students who is highly addicted to games, but the result does not make any different significant compare to those who are not called as non-gamer students.

In current study, the researcher presents some suggestion for students and for the future researcher that will conduct in same area of the topic. The research suggests to Indonesian EFL senior high school students should intent to do reading when playing video games which it is believed that playing video games it can increase English proficiency.

Since the result of this study had only conducted with EFL senior high school students. It is recommended that for further study which has same line as this study, the further



study need to be done with lower grade that can be represent to conduct this recent study. In addition, further studies might conduct to investigate video games affect students reading comprehension, it should be conducting the subject which has smaller grade considering the factors that affect students score which has been told in previous chapter.

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