



The influence of playing digital game in distance learning towards students' speaking skill

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Abstract

The lack of class interaction in distance learning makes students can not practice their speaking skills. In another case, the use of digital game has been familiar among students. This situation forces teacher to serve students with creative teaching-learning in the class. Novelty is on the specific game which was used in this research. The researcher experimented to apply digital games namely "Among Us" then investigated the impact on students' speaking skills. This research aimed to answer the question, how were digital games become an alternative medium to learn English in the distance learning situation? Inherently, this research was a pre-experimental research method with a design of one shoot case study. The main data source in this research was based on students' assessments scores and students' questionnaire scores then supported by other questionnaires and semi-structured interviews. The average scores indicate that students were good in speaking skills overall, it could be known by the detailed results of the assessments that were pre-activity 2.64, during-activity 2.50, and post-activity 2.22. Moreover, the results of regression analysis indicated digital games influenced students' achievement and students' motivation. It can be known by the significance of Annova tables results that students' achievement $0.022 < 0.05$ and students motivation $0.000 < 0.05$. The Researcher concluded that students were comfortable and more confident to learn and practice their speaking skills during playing the digital game. Finally, through giving correct treatment, digital game activity was possible to be an alternative way to learn English especially to practice speaking skills.

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INTRODUCTION

Starting from the middle of 2020 the Indonesian government decided to limit outdoor activity. This was a response to the pandemic situation. Certainly, like many other aspects of everyday life, COVID-19 had a serious impact on students, instructors, and educational organizations around the globe (Mailizar, et al., 2020). To prevent the spread of this pandemic, the central government and regional government issued a policy to change educational activity to be a distance learning model. It was a considerable educational method in the media of learning applied. A stakeholder, institution, teacher, or student should take it as a distance learning policy.

The digital game usage issue is one of the examples that are popular in students' environments nowadays. According to (Johnson, et al., 2012) Trip Wire Magazine reported that in 2011 about 61.9 million people were engaged in digital games; an increase of 9 million from 2010. The digital game has grown in popularity due to the advancement of the internet and computer technologies. Nowadays we find any kind of digital game application on our computer or smartphone easily. The ease of digital game access today brings students to a new habit. The risk is the addiction effect of digital games potentially affecting students in their daily activity. Consequently, they cannot manage their time and become lazy to learn the materials. According to (Griffiths, 2009), as a result of scientific research, it is seen that digital game addiction has many psychological effects on individuals.

(Kétyi, 2013) states "the integration of the mobile device in our language teaching practice could gain our students' valuable additional learning time outside the school and improve their language learning efficiency". According to the statement above, the role of digital game usage is necessary to develop our teaching and learning media in EFL, especially in this situation. Most researchers argue that games have a great educational value for students to build fun and non-stressful learning process.

Moreover, digital games provide an interesting tool for communication. In learning English as a foreign language (EFL), students have to practice more besides learning the theory. (Chen, n.d.) claims that games promote communicative competence and encourage creative and spontaneous use of language. Besides, there is more motivation to learn English through digital game usage. (Bennett, 2011) overemphasized the power of games and play to facilitate deep and meaningful learning where most productive and motivating learning experiences take place outside of school through playing and participation where children do enjoy learning via having a sense of their progression and where the learning is relevant and appropriate.

Therefore this study aimed to investigate digital games' impacts on students' speaking skills. The research gap found by the researcher such as first, (Alamr, 2019) investigated the relationship between playing digital games as a leisure time activity and English language learning achievement among EFL students at an English language center (ELC) in a tertiary institute in Riyadh, Saudi Arabia. The difference between the previous study and this research is the previous study investigated the 4 skill in EFL whereas this research focus on speaking skills used by the students. Second, (Gozcu & Caganaga, 2016) investigates the importance of using games in EFL classrooms that aimed to find out how games were important and effective when used in EFL Classrooms. The difference between the study and this research was the previous study used qualitative descriptive research whereas this research used one shoot case study research.

The influence of distance learning was also a big deal in this background of the study. The researcher explored and investigated the distance learning activity and digital game pattern of tenth graders students at one of public senior high school in Pacitan in the academic year of 2020/2021. The school is one of the favorite schools in Pacitan. Most students there are familiar with the technology application in their teaching and learning process. Moreover, ten graders students are the right time to learn comprehensive in EFL, particularly in speaking skills practice.

The output of this study drew the right application of this tool which was useful for the education field in the future. It is an effort to obviate the negative impact of the digital game by making this habit become a new medium of learning. Finally, in this research the researcher argued that there were positive indications of digital game activity in students' motivation and students' achievements in speaking skills. This research assumed that students can learn English with fun and non-stressful learning through the Among Us game. Otherwise, digital games were recommended to apply to an informal class. Furthermore, the guidelines to apply this tool particularly commercial games like Among us to be alternative media to learn in EFL are needed to deal with the teachers' target.

METHODS

Research Design

The research method is a scientific way of obtaining data with specific purposes and uses. To do research, the right application in the research design is required as a research strategy, so that research can achieve an answer in the form of an answer to the problem of the research.

According to (Fathoni, 2006), "The research method is a way of working used in conducting research". The method used in this research was a pre-experimental research method with a design one-shot case study and mixed-method that were used to measure the students pattern on digital games.

The researcher used the pre-experimental research method for probable causal relationship by exposing one or more groups experimental conditions to get the result of students speaking skills impacted by digital games. Furthermore, this study applied mixed methods design assisted in investigating the problem from students' perspectives on digital game pattern, using both a quantitative approach by the digital games namely Among Us treatment then continued with examining the expected relationship between the result of students assessment as the independent variables while students' motivation and students' achievement as the dependent variables. In addition, the researcher analyzed the perspectives of learners from the qualitative data captured in the questionnaire and the student interview.

(Sugiyono, 2012) classifies three types of research designs commonly used in pre-experimental design methods, namely one-shot case studies, one-group pretest-posttest design, and intact-group comparison. This study used a one-shot case study design. In this section, there was no control group and students were given special treatment or supervision for some time (X mark). The subjects in this study got a treatment by used digital games namely Among Us. Then students were given tests related to the treatment / that is given (mark T).

Table 1 One Shoot Case Study Concept

Subject	Treatment	Test
Group of Students	X	T

Detail:

X : The treatment of using Among Us game.

T : The test that giving after the treatment has been given.

Respondents

Therefore this study aimed to investigate digital games' impact on students' speaking skills. The influence of distance learning was also a big deal in this background of the study. The researcher explored and investigated the distance learning activity and digital game pattern of tenth graders students at one of public senior high school in Pacitan in the academic year of 2020/2021. The school is one of the favorite schools in Pacitan. Located in central of Pacital regency had influence students habituaton. Most students there are familiar with the technology application in their teaching and learning process. Escpecially in this condition. Moreover, ten graders students are the right time to learn comprehensive in EFL, particularly in speaking skills practice.

Data Source

The population was used to state all of the elements and participants of the research from the place as the target of the research. The population was mentioned to all groups based on the samples. According to (Subagyo, 1991), "Population is the object of research as a target for obtaining and collecting data ". The population in this research was ten graders students of at one of public senior high school in Pacitan on 2020/2021 Academic Year. The populations were 55 students and selected to be the sample in the assessment activity were 17 students. The sample is part or representative of the population of the research (Arikunto, 2006). Therefore the variable of this research consists two-component. First, the independent variable was the digital game namely Among Us as the treatment of this research. Second, the dependent variables were students' motivation and students' achievement.

Data Collecting Technique

The research was conducted in three phases: (1) phase one: explained the whole of the research and gave treatment to students (2) phase two: applied of Among Us game treatment continued with students’ speaking assessment. (3) phase three: designed questionnaire and interview of the overall targeted sample of students. Data collecting technique in the research explained as follow:

1. The main collecting data technique was a students’ speaking assessment or test. The researcher designed the speaking assessment instrument that used in this section. It aimed to find out how much digital games “Among Us” influenced students’ speaking skills. Furthermore, the assessment activity was done in three sections including pre-activity, during-activity, and post-activity.
2. The second collecting data technique was a questionnaire. The questionnaire explored three aspects in students’ relationship with a digital game issue and students’ speaking skills: (1) patterns of distance learning, (2) patterns of the digital game, and (3) students’ perception after following the test.
3. Students’ interview was the final data of this research. It was used to deeply investigated students’ perspectives of digital game usage as the medium of learning. It did towards students who have been following the assessment activity. Therefore in this section, three aspects were investigated by the researcher. Those were students’ knowledge of digital games particularly Among Us, students’ perceptions after got the treatment, and students’ perception of speaking skills.

Data Analysis

The collected data in this research were analyzed in the form of quantitative and qualitative data. Exactly the data gathered from assessment activity, questionnaire, and interview.

The quantitative data of this research were obtained from the test. The test consists of three phases. Those were pre-activity, during-activity, and post-activity. The results of students’ speaking performance were analyzed to find out the students’ average score of their speaking skills. The researcher compared the results from three phases and conclude the results by calculating the average score from the three phases of the assessment activity. It was the main data in this research.

Regarding data analysis, the researcher concluded the data based on students’ assessment in three activities then resumed into an average score of each student in each assessment activity called “students’ achievement score”. Moreover, the questionnaire score got by students’ perception after the test was investigated about students’ speaking skills after following the activity called “digital game score” and students’ motivation after following the activity called “students motivation score.” All data were analyzed with regression analysis, calculated by SPSS application. Moreover, files and the communication between students were recorded and securely saved to ensure validity, accuracy and reliability of the data.

Finally, the researcher validated the results of the data. (Creswell, 2012) argues that the role of validation is considered as a measure of how accurate a study was. The validation of the study was taken from expert judgment and quantitative as well as qualitative data collection methods from two main sources: (1) the score of students’ assessment, and (2) the score of the questionnaire after the test.

FINDINGS AND DISCUSSION

Findings

The study's goal was to see how digital gaming activity in distant learning affected students' speaking skills in tenth grade pupils at one of public senior high school in Pacitan in the 2020/2021 academic year. Furthermore, the researcher looked into how digital game usage could be used as a medium for English learning, notably in the field of speaking skills. The conclusions of this study centered on the research hypothesis by analyzing the students' motivation and achievement during the study. Furthermore, regression analysis was used in this study, which was done using the SPSS application.

Table 2. The Resume of Students’ Score

Students	Students’	Students’	Digital
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	Achievement	Motivation	Game
1	2.773333333	5	5
2	2.346666667	5	4
3	3.146666667	5	5
4	1.773333333	4	3
5	2.346666667	3	4
6	2.72	4	5
7	2.133333333	3	4
8	2.613333333	4	4
9	1.866666667	4	3
10	2.666666667	5	5
11	2.506666667	5	4
12	2.253333333	4	4
13	2.733333333	5	5
14	2.666666667	5	5
15	2.453333333	4	4
16	2.613333333	4	4
17	2.88	5	5

The table above showed the final scores of the pupils. The table's specifics were the results of the digital games test, as determined by a questionnaire. The table also included the students' achievement score based on the average of their evaluations, as well as their motivation score based on a post-test questionnaire.

1. Student Motivation

Table 3. Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	game ^a	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: motivation

The table above was about the variable used in this research. The table above explained that the independent variable was digital games and the dependent variable was students' motivation.

Table 4. Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.550 ^a	.302	.256	.606

- a. Predictors: (Constant), game

The table above was the summary of the regression analysis. Based on the table above the score of the correlation (R) was 0,550. Moreover, presentation of the independent variable towards the dependent variable is called coefficient determination (R²) which is the result of quadratic from correlation (R). Based on the table above the results of coefficient

determination (R2) was 0,302. That means the influence of independent variable (digital games) towards dependent variable (Students' Motivation) was 30,2% meanwhile 69,8% was influenced by the other factor besides digital games.

Table 5 ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.382	1	2.382	6.497	.022 ^a
	Residual	5.500	15	.367		
Total		7.882	16			

- a. Predictors: (Constant), game
- b. Dependent Variable: motivation

Annova table explained the real impact (significance) of the independent variable towards dependent variable. Based on the table above score was 6,497 with the score of significance or probability was $0,022 < 0,05$, which means the regression models was possible to predict the dependent variable (students' motivation)

Table 6 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.938	.959		2.020	.062
	Game	.562	.221	.550	2.549	.022

- a. Dependent Variable: motivation

The table above was coefficient table that used to analyze whether if the score of digital game increases in a piece, the score of students' achievement also increases. Based on the table above the result of the positive constant "a" (digital game) score was 1,938 while the score of the students' achievement "b" is 0,562. Here was the formulation of regression models.

$$Y = a + bX \text{ or } 1,938 + 0,562X$$

The conclusion of the coefficients table above was explained as follows:

- 1) The positive Constanta was 1,938 which meant the positive score influenced independent variable (Digital game). If the variable was increased or giving influence in a piece then the dependent variable (students' motivation) also increases.
- 2) The score of coefficient regression X was 0,562 which means if the digital game (X) increases in a piece, then the dependent variable (students' motivation) will increase to 0,562 or 56,2%.

2. Students' Speaking Skills Achievement

Table 7 Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	game ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: students' achievement

The table above was about the variable used in this research. The independent above was the digital game and the dependent variable was students' achievement.

Table 8 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.890 ^a	.792	.778	.166

a. Predictors: (Constant), game

The table above was the summary of the regression analysis. Based on the table above the score of the correlation (R) was 0,890. Moreover, presentation of the independent variable towards the dependent variable that called coefficient determination (R²) which was the result of quadratic from correlation (R). Based on the table above the results of coefficients determination (R²) was 0,792. That means the influence of independent variable (digital games) towards dependent variable (Students' Achievement) was 79,2% meanwhile 20,8% was influenced by the other factor besides digital games.

Table 9 ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.580	1	1.580	57.020	.000 ^a
	Residual	.416	15	.028		
	Total	1.995	16			

a. Predictors: (Constant), game

b. Dependent Variable: students' achievement

Annova table explained to analyze whether the real impact (significance) of the independent variable towards dependent variable. Based on the table above score was 57,020 with the score of significance or probability was $0,000 < 0,05$, which means the regression models were possible to predict the dependent variable (students achievement).

Table 10 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.533	.264		2.022	.061
	Game	.458	.061	.890	7.551	.000

a. Dependent Variable: students' achievement

The table above was coefficient table that was used to analyze whether if the score of digital game increases in each then the score of students' achievement also increases. Based on the table above the result of the positive constant "a" (digital game) score was 0,533 while the score of the students' achievement "b" was 0,458. Here was the formulation of regression models.

$$Y = a + bX \text{ or } 0,533 + 0,458X$$

The conclusion of the coefficients table above was explained as follows:

- 1) The positive Constanta was 0,533, indicating a positive score for the independent variable's influence (Digital game). When a variable is enhanced or given more weight in each, the dependent variable (student accomplishment) rises with it.
- 2) The score of coefficient regression X was 0,533 which means if the digital game (X) increases in a piece, then the dependent variable (students' achievement) will increase reach 0,458 or 45,8%.

Discussions

The researcher limited the discussion based on the hypothesis of this research. Moreover the researcher answered the formulation of the problems of this research. The hypothesis discussed the things that perhaps influenced students after the research. The researcher discussed two aspects, which were 1) Students' motivation, 2) Students' Speaking skills achievement. Furthermore, this section provided a summary and discussed the researcher's hypothesis and the data results of this research.

1. Whether digital games influence students' speaking skills?

a. Students' Motivation

Based on the data finding researcher concluded that digital games influenced students' motivation to learn particularly to practice their speaking skills. The data showed that most students felt that they had no opportunity to practice their speaking skills in the class. The lack of class interaction during distance learning was another cause to deal with this problem. Furthermore, the integration and regulation of digital game usage in the educational field was should be considered (Gozcü, E., & Caganaga, 2016) state that using games creates an environment in which there are fun and satisfaction besides high motivation for learning a language.

In addition to this, games had been found as a serious and pervasive element for providing stimulation and simulation in educational settings. In an informal context, games had often related to the leisure activities of students' off-school practices and most interactive games provide learners with communicative activities as they play games. (Sørensen, B.H., & Meyer, 2007) "games have often been utilized to increase motivation and authentic communicative practices, since games have been conceptualized as a fun factor in language learning."

The role of games was needed to decrease the anxiety of using the target language cannot be ignored. The new habitude of students' environment and the importance of education should be understood to provide more creative teaching and learning process in this situation.

b. Students' Achievement

Based on the data results found by the researcher that students' achievement during assessment activity indicated that as tenth graders students, they were still poor and cannot to speak fluently. The most problem was the less experience to practice their speaking skills. Conversation practice enables language learners to assimilate their acquired knowledge, integrating a variety of cognitive skills at once to produce oral communication. In effect, this is learning by doing (Paisley, 2019).

It knew that the average score of each student in three assessment activities was still low. This point was supported by students' perception about their activity in the class that most of them had not opportunity enough to practice their speaking skills. Moreover, in the pandemic situation, the lack of class interaction made students rarely practice their speaking skills. Otherwise, based on the questionnaire and interview, the researcher concluded that the

right application of digital games was possible to develop student's skills in English, particularly their speaking skills.

The other study Azman & Dollsaid (2018) states that multiple digital games encounter with other numerous speakers help students improving their confidence and build new knowledge as they engage in achieving a collective goal as online players. Digital games were mostly discussed cornering social online interaction in these games. In this research, students' online interaction through Among us game allowed students to connect with their friends with active interaction.

c. The Guidelines of Among Us games as the media of EFL learning

- a) Students should download discord and Among Us,
- b) Students should use discord to communicate during playing the game,
- c) Students login into the game,
- d) Students should create their name by following format (Nama_Kelas),
- e) Students join the room that was created by the teacher,
- f) The game will start when all participants already join in the room, the participant is 4-10,
- g) Students should use the English language to communicate with each other,
- h) Students should communicate one by one during the discussion section,
- i) The students who have dead do not permit to join the discussion section,
- j) Students should be active and communicative during the discussion section,
- k) In addition, students should note every new vocabulary that got during playing the game.

CONCLUSION

This study provided strong positive indications about the utilization of different types of digital gaming opportunities as means of facilitating EFL learning as an out-of-classroom leisure activity. It could be known by the detailed results of the assessments that were pre-activity 2.64, during-activity 2.50, and post-activity 2.22. Moreover, the results of regression analysis indicated digital games influenced students' achievement and students' motivation. It could be known by the significance of Anova tables results that students' achievement $0.022 < 0.05$ and students motivation $0.000 < 0.05$. Furthermore by the observation the researcher found that mostly students was agree to use digital game as the alternative media to practice their speaking skills.

The major findings of the study confirmed that playing digital games might have a positive effect on some aspects of EFL learning. Specifically, playing Among us games that require and provide students to practice and train their speaking skills. These games stimulate the incidental and indirect language learning process. In this process, the learners' attention is directed toward playing and succeeding in the game, while they unintentionally internalize a large number of language expressions, vocabulary, and structures.

The outcomes of this study identified social interaction experiences through online gaming as an important provider of an authentic English language environment. EFL learners engaging in digital game social interactions benefitted from these practices, particularly in enhancing communicative competencies. This can be achieved by increasing the stimulation and motivation for language learning for students by utilization of new pedagogical strategies rather than the more common teacher-centered strategies of the traditional classroom.

Finally, the need to obviate the negative impact of the digital game around students' in distance learning situations was the motivating issue for this research study. Furthermore, the learning media to practice students' speaking skills is also a consideration in this research. This study focused on Among Us digital game which are more to investigate. In the conclusion, the researcher believes that the variety of learning media and application of technology development is necessary things that should be noticed by the teacher today.

REFERENCES

- Adams, S., & Burke, M. (2009). New literacies: What can popular culture teach us about information and media literacy? In M. Leaning (Ed.), *Issues in Information and Media Literacy: Education, Practice and Pedagogy*, 2, pp. 191-207.
- Alamr, A. S. (2019). *Digital games and English Language Learning (EFL) in tertiary education in Saudi Arabia* (Thesis Collection). University of Wollongong.
- Arikunto, S. (2006). *Prosedur Penelitian*. Asdi Mahasatya.

- Azman, H., Salman, A., Supyan H., Norizan A. R., Hashim, M. S., Abu Hassan, M., Samsinar M. S., Rozhan M. I., Manap, M. R., & Satirah A. (2015). Measuring readiness, acceptance and satisfaction of innovative digital economy: Preliminary findings. *E-Bangi-Journal of Social Sciences & Humanities: Special Issue*(1), 023–030.
- Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (Covid-19) pandemic in Georgia. *Pedagogical Research*, 5(4), 1-9.
- Bernard, R. M., P. C. Abrami, Y. Lou, E. Borokhovski, A. Wade, L. Wozney, P.A. Wallet, M. Fiset, and B. Huang. 2004. How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research* 74 (3), 379–439.
- Bennett, A. (2011). The role of play and games in learning. *The 33rd Earl V. Pullias Lecture*. University of South California (USC) USA., 33rd.
- Chen, I.-J. (n.d.). *Using games to promote communicative skills in language learning*. <http://iteslj.org/Techniques/Chen-Games.html>
- Creswell, J. W. (2012). Choosing among five approaches: Qualitative inquiry and research design. Sage. <https://doi.org/10.1007/s10639-019-10027-2/>.
- Fathoni, A. (2006). *Metodologi penelitian dan teknik penyusunan skripsi*. Rineka Cipta.
- Gozcu, E., & Caganaga, C. K. (2016). The importance of using games in EFL classrooms. *Cypriot Journal of Educational Science*, 11(3), 126–135.
- Griffiths, M. D. (2009). Online computer gaming: Advice for parent and teachers. *Education and Health*, 1(27), 3–6.
- Johnson, L., Adams, S., & Cummins, M. (2012). The NMC Horizon Report: 2012 Higher Education Edition. Austin, TX: The New Media Consortium. <http://www.nmc.org/publications/horizonreport-2012-higher-ed-edition>
- Kétyi, A. (2013). Using smart phones in language learning: A pilot study to turn CALL into MALL. In L. Bradley, & S. Thouëсны (Eds.), *20 Years of EUROCALL: Learning from the Past, Looking to the Future*. Proceedings of the 2013 EUROCALL Conference, Évora, Portugal. <https://doi.org/10.14705/rpnet.2013.000150>
- Mailizar, Almanthari, A., Maulina, S., & Bruce, S. (2020). Secondary school mathematics teachers' views on e-learning implementation barriers during the Covid-19 pandemic: The case of Indonesia. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7), em1860.
- Paisley, V. (2019). *Five Reasons Why Conversation Practice Is Key to Learning a Language*. Learnlight. <https://insights.learnlight.com/en/articles/conversation-practice-is-key-to-learning-a-language/>
- Sørensen, B.H., & Meyer, B. (2007). *Serious Games in language learning and teaching: A theoretical perspective*. www.digra.org/dl/db/07312.23426.
- Sourmelis, T., Ioannou, A., & Zaphiris, P. (2017). Massively multiplayer online role playing games (mmorpgs) and the 21st century skills: A comprehensive research review from 2010 to 2016. *Computers in Human Behavior*, 67(1), 41-48.
- Subagyo, J. (1991). *Metode Penelitian dalam Teori dan Praktek*. Rineka Cipta.
- Sugiyono. (2012). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R & D*. Alfabeta.