
The Use of Game-Based Learning on Student's Speaking Skill and Speaking Anxiety

(An Experimental Research at Seventh Grade of MTs YASMU)

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ABSTRACT

Speaking is one of important skill that we have mastered in English. It's made us easier to get a new friend. Besides, speaking is a difficult skill to master for learners because speaking combines the parts of writing and listening. This research goals at investigating the use of game-based learning on students' speaking skill and students' speaking anxiety. The researcher used a quantitative method with a pre-experimental design by using the validity and reliability test instrument. The population in this research was seventh class grade MTs YASMU Manyarejo Manyar Gresik. After collecting data using a test, one class was given a pre-test before treatment and a post-test after treatment. Then data analysis using SPSS or Manual counting with the formula paired simple t-test. The result showed that the experimental group scores had a significant difference before being taught the game-based learning method. It can be said with more than 95% confidence, that the anxiety means in control and experimental group before using game-based learning was not significantly different. Therefore, the results revealed that balancing as a stress-free tool of learning has the potential of reducing students' anxiety to improve their speaking skill.

Keywords: Educational Game, Game-Based Learning Method, Speaking Skill, Speaking Anxiety

I. INTRODUCTION

There are four skills in English, that are reading skill, listening skill, writing skill, and speaking skill (Hanna & Setiyawan, 2018). From those skills, some experts say that speaking is learned by students at first. The national curriculum of America which has been discussed by Bachelor of Education trainee explains that the first skill in which studied by new learners are speaking then listening, reading and writing. From all of skill above, the researcher focuses on speaking skill because speaking is regarded as the important skill which studied by English learners. It is supported by statement of Hervina; she says that speaking skill in English is very needed by many people as means of communication each other and with other nation in the international relation (Hervina, 2014). Because of that english is taught in school and course. People are expected to be able to speak English well to compete with other country, because speaking is easier to be practiced than other skills, it is related to our daily life.

Speaking anxiety is something that has a great impact on one's self confidence since it often make one experience failure when not being able to speak out and show what one knows. This speaking anxiety makes learners have low confidence to perform in front or to

other people, and because of that the learner can not understand the teacher explanation well. Foreign language anxiety is caused by the apprehension of communicating with others in the second language context (Horwitz et al., 1986). Besides, anxiety is a state of uncomfortable emotion where danger is perceived, and the victim has a powerless feeling with the expression of tension in anticipation of danger. In the classification of anxiety (Scovel, 1978). And students anxiety include Nervous when speaking in front of other people, Nervous when asked to speak english, and Afraid to be criticized when wrong.

Anxiety occurs in all people in everyday life, everywhere and all situations. Anxiety has been identified as one of the most important negative elements impacting second language learning, particularly in terms of motivation and confidence. Students in this study come from a variety of backgrounds. It indicates that the students have their own personality. Students who attempt to speak English in front of the class or their friends have difficulty and anxiety throughout the speaking session.

Kirkwood and Melton argues that anxiety disorders among the most common mental disorders encounter such situation where they have to perform, but when they

encounter such situation, they suffer intense distress and anxiety (Tuma & Maser, 2019).

According to the result of the study, it was concluded that educational games positively affected the three-dimensional speaking order and style of speech, including the use of voice, which are composed of audibility and meaningfulness dimensions, topic and thought transfer, refinement, and use of time. It was concluded that educational games did not affect student's speaking anxiety (Huri & SEZGİN, 2020).

Based on the focus of the problems in this study, the purpose of this study was to look for the results of calculating the correlation between the two variables, namely student's anxiety in speaking English and student's speaking skills in language classes. So, in speaking skills, the teacher has an important role in developing the student's competence. Being a teacher should be able to design the lesson to make the students interested in speaking activities. Situations like this are very suitable if using the Game-based Learning method. The students must speak up and

Practice whatever they know the vocabulary. If they get the rule of playing the game, it will be easy to improve their speaking skills with less anxiety.

For speaking to be effective, a well-programmed education and training process and an appropriate education and training environment where the barriers to speaking are eliminated needed. Games have been more employed in the education and training process in recent years, and through games, permanent and meaningful learning is targeted. Game based learning itself is a learning model that combines learning materials into learning materials so that learners are involved with each other (nur Aziz & Rohmah, 2022). In learning students are required to learn, but with a playing approach. The learning process that takes place is done in the way. The game has been designed in accordance with the material to be taught.

There are at least four reasons behind why research needs to be done, namely Awareness of the limitations of knowledge, understanding, and Ability, Fulfillment of curiosity, Troubleshooting, and the fulfillment of self-development.

From the explanation above, the teacher should need strategies, approaches, method, and techniques in the classroom that are in accordance with the current condition of students. Despite the importance of using games in the process of language learning and teaching, there is a gap in the field of using

games to improve the students' speaking skill. Therefore, this study deals with the effect of game-based learning on students' anxiety and students' speaking skill. To solve this problem, the researcher inspired us to use Game-based learning methods to make it easier in students speaking skills and students speaking anxiety. According to Kuzu and Ural findings, when games and education are combined, it can be educative and education environments can be entertaining, and learners who learn with the use of games gain positive attitudes and can be more motivated while learning (Derakhshan & Khatir, 2015)."

II. LITERATURE REVIEW

THE DEFINITION OF SPEAKING SKILL

One of the four major language skills is speaking skill that is productive. It means when the speaker produces language orally with the purpose of conveying his ideas to others. This activity demands knowledge of the language rules as well as the social rules for implementing this knowledge to produce speech, it means the ability to construct sentences that are grammatically correct. Speaking is a skill to convey some thoughts, ideas, and feeling. It can be formal and informal: informal speaking is typically used with family and friends, or familiar people. Formula speaking occurs in business or

academic situations, or when meeting people for the first time (Khonmohammad et al., 2014). Based on Holtgraves in Kasim, speaking is the process to deliver the speakers' aim to the listener (Safrida & Kasim, 2016). Speaking is the process of building and sharing meaning through the use of verbal and non-verbal symbols, in a variety of context (Chaney & Burk, 1998). Speaking is one of four macro skills : reading, writing and listening. Speaking should be developed as an effective means of communication in both the context of first and second language teaching (Boonkit, 2010). Speaking can be seen as an important skill among other language skills (listening, reading and writing), because knowing a language is defined as speaking this language (Ur, 1996). Since almost everyone knows how to speak, speaking education is seen as a negligible skill. However, it is very important for students to speak effectively and confidently to realize most of the basic skills.

GENERAL ANXIETY

Anxiety is defined as someone's fears in facing something that can be a serious problem for him/her. Horwitz et al stated that anxiety is the feeling of apprehension, tension, worry, and nervousness dealing with an arouse of the automatic nervous system (Horwitz et al., 1986). In addition, Ormrod

also said that anxiety can be defined as apprehensions and uneasiness feeling worry that happened because of the unsure result of a particular attempt (Santrock, 2011).

The phenomenon of anxiety has been widely acknowledged as one of the most important psychological phenomena that is experienced in many social or learning contexts and relates to fear, and worries. Anxiety studied generally focuses on math anxiety, writing anxiety, reading anxiety, exam anxiety, writing and speaking anxiety in second a language. Anxiety is a negative condition that affects individuals emotionally and physically, that has negative reflection of learning (nur Aziz & Rohmah, 2022). Sener defines anxiety as “an unpleasant affective condition similar to dread or nervousness, with physiological and behavioral manifestations”. Speaking anxiety directly affects success in speaking. Speaking anxiety may occur before, during or after speaking. Speaking anxiety is one of the anxiety types that usually occurs when someone is speaking in front of the community or during dialogue with people and that is manifested by some physical symptoms such as sadness, anger, fear, sweating, and increased heartbeat.

According to those theories, anxiety is a negative impact that is closely connected to

fear that the two phrases are sometimes used interchangeable.

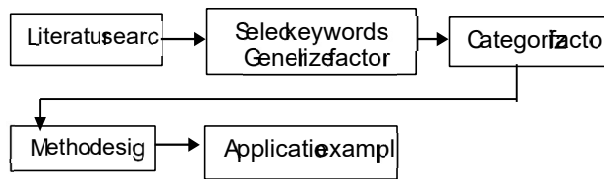
SPEAKING ANXIETY IN TEACHING

Speaking anxiety is the fear that is faced by students when delivering or preparing a speech in front of people or the public. It usually happened because the students are not confident with their English ability, they were afraid and shy to practice with the target language, in this case, English, also they were scared about making mistake.

DEFINITION OF GAME-BASED LEARNING

Game-based Learning or GBL is an ancient approach to help students learn and improve their knowledge in different areas of life. Game-based Learning experience led to higher engagement and better learning outcomes. It is assumed that the game is a digital game, but this is not always the case. A corollary to this definition is that the design process of games for learning involves balancing the need to cover the subject matter with the desire to prioritize game play (Plass et al., 2010).

Generation of the GBL model in this study involved five stages adopted from (Shi & Shih, 2015).



Game-based learning (GBL) describes an environment where game content and game play enhance knowledge and skills acquisition, and where game activities involve problem solving spaces and challenges that provide players/learners with a sense of achievement (Kirriemuir & McFarlane, 2004). Game-based Learning has been instrumental in creating active learning experiences and enhance learning outcomes by improving the retention of knowledge (Ucus, 2015).

According to Azan & Wong the game-based learning model is a game-based learning model that captivates and engages users, with specific end goals, such as developing knowledge and skills. The game-based learning model is a stand alone unit with a definite start, a game, and an end. Students know that they are engaged in gaming activities, and in the end there is a "winning state". Games can provide different types of learning content in different settings. Game-based learning is often used as a one-time teaching event to provide formal learning either online or in the classroom. In terms of learning, there are

several things that teachers need to pay attention to including student memory. In some studies, most students only remember 5-10% of what they read. Increase to 30% of what they see visually. It becomes 50% if they see someone practicing it directly while explaining. It can drastically reach 80% if they do it themselves, even if it's just a simulation. Games for learning may be defined as games with specific learning goals. There is no general agreement among theorists on the definition of games, but many agree on the characteristics of games (Mayer & Moreno, 2003). Research has revealed that online games can help children who experience attention disorders. This was concluded by a professor at Nottingham University, and has been repeated by many in related studies. By both (1) in class instructions promoting games to be language learning materials by the teacher, and (2) student's application of the video games in-class and out-class, the project had finally resulted non-English majors' improvements in English language presentations, especially the information administration majors. It implied computer games should be approved to be English Learning materials, because it contributes to students language proficiencies, especially in oral presentation abilities (Lin, 2020).

THE IMPORTANCE OF GAME-BASED LEARNING

Playing games on the internet can improve a child's learning and development ability. Of course, children should not spend every second, every day staring at a computer screen. Nonetheless, education and gaming on the internet are not enemies. Many people say they look more like friends, and they look like something interesting. Playing games also will make them feel comfortable during learning. Maiga states, play is an important rule in learning environment because it enhances memorable learning effectively and calls for students' attention and advocates the repetition of the material as a result of events.

In terms of learning, there are several things that teachers need to pay attention to including student memory. In some studies, most students only remember 5-10% of what they read. Then only remember 20% of what they heard. And increase to 30% of what they see visually. It becomes 50% if they see someone practicing it directly while explaining. It can drastically reach 80% if they do it themselves, even if it's just a simulation. The game is something interesting and fun. With learning packaged in the game, students will feel comfortable, interested and fun so that the student's

memory of the material delivered is also quite high. One of the advantages of applying games is that they help students improve all the skills : reading, writing, speaking, and listening (Aslanabadi & Rasouli, 2013).

Games are good media to help students learn better because games will make study in fun and relax way, it is because games is activity not only amusing activity but also can enhance their ability in every skill. In line with this, Poulsen states, "playing a game is an activity that enhancing skill use to solve the obstacle and playing a game is also basically warning experience (Poulsen, 2010). Games also teach student other things that they don not get from usually way learning activities like some brainstorming.

III. METHOD

This research design in this study is quantitative research using preexperimental research by preliminary test and post-test group design. The pre-experimental research will be given a test before treatment, and after treatment was complete, then given a post-test to see the results. The onegroup preliminary test and post-test design involves three steeps: administering a preliminary test measuring the dependent variable, applying the experimental treatment X to the subject, and

administering a post-test again measuring the dependent variables (Ary, 2012)

IV. RESULT

Based on the data obtained by researchers that will be presented according to the time of research using a standardized test method of advanced first grade students who use pre-test and post-test. Analyzing the data can address problems that previously lead to researchers formulating problems. The descriptive of Pre-Test and Post-Test

The data were collected from students' pre-test scores which were conducted before the researcher using Game-based learning method and students' post-test score which was conducted after the researcher using Game-Based learning method. Before doing the teaching and learning activities, the researcher performed a pre-test. This was followed by 21 students of the seventh grade of MTs Yasmu Manyarejo Manyar Gresik.

To examine the first question of this research, the results were compared separately in control group (pre and post). A pair of simple T tests was used. Because P value is lower than 0.01, it can be said with more than 99%confidence, that means anxiety in control group before and after using games was significantly different. ($t =$

3.99 , $df = 14$, $p < 0.01$) and comparison of means showed that the mean of post anxiety in the control group was more than pre anxiety ($M_2 = 89.73 > M_1 = 82.73$).

Table 1 Paired simple T-Test between pre and post-test Anxiety in control group.

Time	N	Mean	Std.deviation	T-Test	df	P-Value
Pre-test	15	82.73	5.38	3.99	14	0.001
Post-test	15	89.73	7.10			

And, the results in Experimental group (pre and post) were examined. Paired sample t test was used. Because the P value is lower than 0.01 ($p\text{-value} = 0.0005$), it can be said with more than 99% confidence, mean of anxiety in experimental group before and after using game based learning was significantly different ($t=19.79$, $df = 14$ $p < 0.01$) and comparison of means showed that the mean of anxiety in experimental group after using games was less than before using game-based learning ($M_2 = 53,47 < M_1 = 83$).

Table 2 Paired simple T-Test between pre and post-test Anxiety in Experimental group.

Time	N	Mean	Std.deviation	T-Test	df	P-Value
Pre-test	15	83.0	3.98	19.79	14	0.0005
Post-test	15	53.47	5.17			

In addition, to study the second research question. The results were compared separately in control group (pre and post), paired-samples t test was used. Regarding P-value that is more than 0.05 (p-value = 0.6), it can be said with more than 95% confidence, mean of speaking in control group was not significant different in pretest and post test ($t = -0.51$, $df = 14$, $p > 0.05$).

Table 3 Paired simple T-Test between pre and post-test speaking skill in control group.

Time	N	Mean	Std. deviation	T-Test	df	P-Value
Pre-test	15	12.33	2.10	-0.51	14	0.6
Post-test	15	12.54	1.36			

Then to investigate this question in experimental group, paired sample t test was used. Regarding P value is lower than 0.01 (p-value = 0.0005.) it can be said with more than 98% confidence, mean speaking skill in

experimental group after and before using game-based learning was significantly different ($t = -8.67$, $df = 14$, $p < 0.01$) and comparison mean showed that speaking skill after using games was more effective than before using game-based learning.

Table 4 Paired simple T-Test between pre and post-test speaking skill in Experimental group

Time	N	Mean	Std.deviation	T-Test	df	P-Value
Pre-test	15	12.27	1.28	8.67	14	0.0005
Post-test	15	16.0	1.36			

As mentioned earlier, the present study investigated the use of game-based learning method on students' speaking skill and students speaking anxiety. The finding of this research indicated the superiority of games in experimental group which is a confirmation of the research hypothesis: using game-based learning method positively affect students' speaking skill and students' speaking anxiety. Balancing the effectiveness of using games, recent research in line with several other studies found that using game-based learning is significantly effective on students' speaking skill and students' speaking anxiety.

SCORING CRITERIA

The researcher used speaking with games from pre-test and post-test. To assess the quality of students' speaking, the researcher used an assessment rubric. Aspects of assessment are fluency, pronunciation and accuracy, vocabulary and grammar. In addition, the assessment rubric used was adopted from Brown.

Fluency

Students must Smooth and fluid speech; few to no hesitations; no attempts to search for words; volume is excellent to get an excellent value. Some word that student usually gotten wrong, when the teacher take attendance of them, they should be answering *present*. It's a simple word but they can't practice it with their reason 'difficult to say'. Therefore, they can say 'present' although without stressing word. Or when they want to permit, they can say excuse me. But they are afraid to say it so they will say with low volume, like *eks-kiyus me, bu*.

Pronunciation and accuracy

Students must have an excellent pronunciation, and a good effort at accent. Some expressions that students usually gotten wrong like, *have done* their accent still *medok* at word 'done' with stressing D letter. Or saying *dilligent* with accent *medok* become *dellighen*.

Vocabulary

Excellent control of language features; a wide range of well-chosen vocabulary is also important in speaking. They must match a word; they should fix it. For example, *good morning* for *selamat pagi*, *good afternoon* for *selamat sore*. Or *present* for *hadir*, *absent* for *alpha not* there is not, and *permit* for *izin*. And sometimes, they still confused for using 'good morning' and 'good afternoon'.

Grammar

Students must have accuracy & variety of grammatical structures to get an excellent value. Some expression that students usually gotten wrong: *I go to toilet, bu* it could be *May I go to toilet sir/ miss?* or *my hobby is football* it could be *my hobby is playing football*.

V. DISCUSSION

THE EFFECT OF GAME BASED LEARNING ON STUDENT'S SPEAKING SKILL

GBL is a learning approach that uses games or games as a tool to improve students' skills. In this discussion, we will explore how GBL can affect students' speaking skills by referring to educational theories and the results of previous research. One theory that supports the use of GBL in speaking learning is constructivism (Muhsin & Aziz, 2021). This theory argues that students are more

active in learning when they are directly involved in the learning process. With GBL, students can learn while playing, creating a more interactive and engaging learning experience. They can speak in a more natural context, thus improving their speaking skills.

Previous research has also shown positive results related to the use of GBL in improving students' speaking skills. A study conducted by (Plass et al., 2020) in their book "Games and Learning" mentions that students who engage in GBL tend to be more confident in speaking, because they practice speaking skills in relaxed situations and are less exposed to the risk of negative judgments. In addition, Vygotsky's theory of the Proximal Zone of Learning (ZPD) is also relevant in this context. This theory focuses on the role of mentoring in learning. In the context of GBL, games can serve as "virtual companions" that help students speak better. They can interact with characters in the game or fellow players, which in turn can improve their speaking skills.

In research by (Velasco Bautista, 2022), he stated that GBL can help students develop various aspects of speaking skills such as vocabulary, grammar, and intonation. This happens because games often require verbal interaction in a specific context, which indirectly trains students' speaking skills.

However, it should be noted that the effectiveness of GBL in improving students' speaking skills may vary depending on its implementation. Research conducted by (Laine & Lindberg, 2020) highlights the importance of proper game design. They found that well-designed games, with a focus on clear learning objectives, could provide better results in the development of speaking skills.

In addition, several studies have also shown differences in the effectiveness of GBL based on individual characteristics of students. For example, Boyd and Hailey (2011) found that students' motivation and their initial skill level in speaking can influence the extent to which GBL can improve speaking skills. Comparisons between theory and previous research results suggest that GBL can potentially improve students' speaking skills, especially when games are well-designed and consider students' individual characteristics. Vygotsky's constructivism and ZPD theory support this approach by emphasizing the importance of experiential learning and virtual mentoring. However, it is important to remember that research results may vary, and factors such as student motivation and game design can affect the effectiveness of GBL. Therefore, the use of GBL in improving

students' speaking skills should be carefully considered, considering the context and characteristics of the students concerned.

THE EFFECT OF GAME BASED LEARNING ON STUDENT'S SPEAKING ANXIETY

Speaking anxiety can be a serious obstacle to learning, and the use of GBL can have a significant impact in reducing this anxiety. In this context, we will explore how GBL affects students' speech anxiety, with reference to educational theories and the results of previous research.

Stephen Krashen's Affective Filter Hypothesis states that anxiety or fear can be a barrier to second language acquisition (Krashen, 1982). In the context of language learning, speech anxiety can prevent students from actively participating in learning. GBL can be an effective tool in lowering this affective filter, as the use of games tends to create a relaxed and enjoyable learning atmosphere.

Previous research has shown that GBL use can significantly lower students' speaking anxiety. A study conducted by (Loderer et al., 2020) found that students who engage in game-based learning tend to feel a decrease in their anxiety levels. This is since GBL creates a pressure-free environment, where students feel more

comfortable experimenting in speaking. In addition, the Self-Determination Theory (SDT) proposed by Deci and Ryan states that high intrinsic motivation can help reduce anxiety. In the context of GBL, games often stimulate students' intrinsic motivation, as they engage in activities, they find fun and challenging. This can strengthen their confidence and gradually lower their anxiety related to speaking.

However, it should be noted that a less precise or less attractive implementation of GBL for students can have the opposite impact. A study conducted by Herga et al. (2018) highlights the importance of proper game design. If the game is not interesting or too complicated for students, this can increase their anxiety levels, as they may feel pressured to hit difficult targets. It is important to understand that speech anxiety can vary depending on the individual characteristics of the student. For example, research by (Chen & Hwang, 2022) found that factors such as personality, past experiences, and learning motivation can influence students' levels of speaking anxiety. Therefore, the use of GBL as a tool to reduce speech anxiety needs to be tailored to the individual characteristics and needs of students.

A comparison between the theory and the result of previous research suggests that GBL can have a positive impact in lowering students' speaking anxiety, especially when games are designed to stimulate intrinsic motivation and create a relaxing learning environment. The Affective Filter Hypothesis and Self-Determination Theory provide a solid foundation to support the positive effects of GBL in reducing speech anxiety. However, keep in mind that an ineffective or less attractive implementation of GBL can have the opposite impact, as well as the importance of paying attention to the individual characteristics of students in the learning process. Thus, the use of GBL to reduce students' speaking anxiety should be made with careful consideration of the context and needs of the student concerned.

VI. CONCLUSION

This research goals at investigating the use of game-based learning on students' speaking skill and students' speaking anxiety. Unfortunately, most of the students can't communicate with each other because of some factor that prevents them from communicating. To conduct this research, the quantitative approach was used. To answer the reseach question it can be said with more than 95% confidence that the anxiety means in control and experimental

group before using game-based learning was not significantly different. Therefore, the results reveald that balancing as a stress-free tool of learning has the potential of reducing students' anxiety to improve their speaking skill.

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