USING JIGSAW TECHNIQUE THROUGH AUTHENTIC MATERIAL TO REDUCE STUDENTS' ANXIETY

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ABSTRACT

Penelitian ini bertujuan untuk menemukan pengaruh *jigsaw technique* dan *jigsaw technique through authentic material* terhadap kecemasan siswa di dalam membaca. Selain itu, untuk mengetahui perbedaan kecemasan siswa setelah diberikan dua perlakuan yang berbeda. Penelitian ini adalah penelitian kuantitatif yang menggunakan *quasi experimental design*. Penelitian ini dilaksanakan di kelas dua SMA .Data penelitian dikumpulkan menggunakan kuesioner dengan *likert scale.* Hasil penelitian menunjukan adanya penurunan terhadap kecemasan siswa setelah diajar menggunakan *jigsaw technique,* dan *jigsaw technique through authentic material.* Ini dibuktikan dengan sig.(2-tailed) yakni 0.00. Di samping itu, ada perbedaan hasil penurunan terhadap kecemasan siswa di tiga kelas. Ini dapat dibuktikan dengan nilai Sig. (2-tailed) yakni 0.022 dan penerapan *jigsaw technique* memiliki penurunan yang paling tinggi terhadap kecemasan siswa. Pada akhirnya, penelitian ini menyarankan guru Bahasa Inggris seharusnya mengunakan *jigsaw technique* untuk menurunkan kecemasan siswa didalam pengajaran membaca.

This study was aimed to investigate the effect of jigsaw technique and jigsaw technique through authentic material toward students' anxiety in reading. Besides, the aim was to find out the difference of students' anxiety in two classes after giving three different treatments. This study was quantitative that used quasi experimental design. This study was conducted at SMA Negeri 1 Trimurjo. The data were collected by using questionnaire that used likert scale. The results showed there was a decrease of students' anxiety after giving treatments using jigsaw technique and jigsaw technique through authentic material. It was proved by the sig.(2-tailed) was 0.00. Besides, there was a difference of students' anxiety in two classes. It was proved by the sig.(2-tailed) was 0.22 and the use of jigsaw technique had highest decrease toward students' anxiety. Last, it is suggested that English teacher may considering using jigsaw technique to decrease students' anxiety in teaching reading.

Keywords: jigsaw technique, authentic material, anxiety

INTRODUCTION

English is foreign language that should be mastered by the students from junior high school level through senior high school level. In learning English, there are four skills, i.e, listening, reading, speaking, and writing. The students have to master all skills in English, but the most important skill is reading because the success of students' learning depends on the greater part of their ability to read. Beside that, the students will have a chance to be success in their study if the students can read a text effectively.

In reading activity, the students should have a good reading skill when they want to get idea and information from the text. Furthermore, reading activity becomes meaningless without comprehension. Comprehension not only knows what the letters stand for, but it also understands the ideas. Therefore, there is no reading without comprehension. Besides, reading is an active process of interacting with print text and monitoring comprehension to establish meaning. It means that the students should be active in the process of comprehending the text in order to establish the full meaning of the text. However, there are some factors that become an obstacle for the students to get comprehension in reading. One of the factors may be the students' affective filter.

In terms of affective filter, the ideal affective filter is when the students have low affective filter. It is when the students have high self-confidence, high motivation, and low anxiety. These aspects of affective filter can help the students to learn easily and effectively. However, the researcher's pre-observation revealed that the students still have high affective filter. Then, the students still have low motivation and high anxiety. This condition may be affected by the material that the teacher gave to them and the technique that the teacher implemented. The

teacher used uninteresting material so that the students' motivation was low because the material was not interesting for them. Besides, it may be caused by the technique used by the teacher. It cannot be argued that the role of technique and material are important in teaching learning process because material and technique can determine the students' self-motivation, and anxiety. Because of this, the teacher should use enjoyable and appropriate technique, so the students will enjoy learning English in the classroom.

There are many factors that may become obstacles for the students in learning, that is, anxiety, motivation, and self-confidence, but based on the researcher's assumption anxiety is the most important aspect that should be considered by the teacher in teaching process. Anxiety is a negative factor that can influence the students' input in learning process. The students may get less input when they have high anxiety in learning English. Then, anxious learners may be as those having manifestations in class include panic, nervous, apprehension, worried, and afraid. As the researcher's pre-observation, many students got difficulty to pronounce English words when the teacher asked them to read. After reading the text, the teacher asked some questions that related to the text, but the students cannot answer the questions well. Moreover, the students tend to be passive and silent when they have high anxiety or panic in teaching learning process. It may be assumed that this condition makes a non-active teaching learning process or there is psychological burden in students' mind. The students may be afraid of making a mistake. So, it is a dangerous situation because the students may not focus on the lesson, but they may prefer to focus on the feeling of afraid.

In order to overcome the problems above, it can be said that an alternative technique and a good material are needed in this situation. Technique is a tool that

can help the teachers to make a teaching learning process more effective. In this case, the researcher proposes an effective method called cooperative learning. Cooperative learning is one of methods that can be used by the teachers in classroom. Cooperative Learning is an effective strategy for classrooms with English Language Learning students in them. Adams (2013) states that cooperative learning is meant to provide the learners with a chance to learn a material from their groups. Then, Adams (2013:13), he states students work together in small groups on a structured activity. So, it is meant to provide the learners with a chance to learn a material from their groups. This method may can promote better learning, improve learners' motivation, enjoyment, and decrease students' anxiety of the learning process. It is caused the process in this method is students' centered, not teacher centered and all students become expert in this method. So, it can be said that this method may reduce students' anxiety.

On the other hand, there are many techniques in cooperative learning method, but one of the cooperative learning's techniques supposed to be useful in this teaching reading is jigsaw technique. Jigsaw technique gives an opportunity to increase the students' reading comprehension because every student has an obligation to master the text in order to teach their friends. Besides, this technique is not only encouraging the students on learning the group's task and activities but also help the students in building a social personality. The teacher's role changes from giving information to facilitating students' learning. Then, jigsaw technique is a unique teaching technique where the students are able to learn and teach each other and every student becomes an expert here. So, jigsaw technique is a way for students to work cooperatively and help each other to learn new material and each group will get different material from the teachers.

On the other hand, it is important to know how to choose a good material because material is a core of teaching learning process. A material is part of learning process that cannot be separated by the others. Tomlinson (2001:13) states materials mean anything which is used to help language learners to learn. So, teaching material is very important because it can determine how the students' affective response in learning activity. There are many kinds of material, such as teacher-made material, text-book, work-book, and authentic material, but the researcher prefer to use authentic material than others. In this study, the researcher chose authentic material because it contains a lot of information and knowledge for students.

Authentic material is a material designed by native speaker. Then, it can be said authentic material is a material that is not specifically prepared for pedagogical purposes. Moreover, authentic material refers to the use of texts, photograph, video selection, newspaper, magazine, short stories, novel and other teaching resources. Teaching material is a key component in most language teaching program, so the teachers should prepare a good and a suitable material for the students that can improve students' reading comprehension and interest in learning. The use of authentic text may be now considered to be one way for increasing students' motivation for learning since they learn the real language and it is used by the community that speaks it. In this research, the researcher wanted to see the effect of jigsaw technique and authentic material on students' anxiety.

This study attempted to reduce the students' high anxiety by using jigsaw technique through authentic material. The researcher used jigsaw technique through authentic material to reduce students' high anxiety in reading context. This technique and material were aimed to reduce students' high anxiety. Jigsaw

technique is technique that can make the students more active in the class and they can share their idea freely. Besides, authentic material is an interesting material that can increase the students' motivation. The researcher assumed it might be effective if she used jigsaw technique through authentic material in classroom. It was hoped that the students' problem (high anxiety) would be accomplished by using jigsaw technique through authentic material.

METHODS

This research was aimed to find out the effect of jigsaw technique, authentic material, and jigsaw technique through authentic material toward students' anxiety. This research was quantitative research design, in which data tend to use statistic as measurement in deciding the conclusion. The researcher used quasi experimental that chose the samples randomly. The researcher used two classes as the experimental class where the students would be given the pre-questionnaire before the treatment and the post-questionnaire after the treatment. The design of this research is described as follow:

K1 = **T1 X1 T2**

K2 = **T1 X2 T2**

(Setiyadi, 2006:134)

The researcher used three classes as the samples. K1 was experimental class one that was given treatment using jigsaw technique. Then, K2 was experimental class three that was given treatment using jigsaw technique through authentic material. So, two experimental classes that were used as the sample got different treatment from the researcher. This research would be conducted in four meetings with presentation as follows, the first meeting was for try-out questionnaire, the second

meeting was for pre-questionnaire, the third meeting was for treatment, and the fourth meeting was for post-questionnaire.

The population of this research was the second grade students of Senior High School 1 Trimurjo of 2015/2016. There were five classes in which each of them consists of about 30 students. There were 67 male students and there were 83 females students. The class as samples were selected by using purposive sampling because it was impossible to take sample randomly in quasi experimental. Then, the samples were XI 1, XI 2. These classes were used by the researcher as experimental class. The researcher taught XI 1 by using jigsaw technique. Then, the researcher taught XI 2 by using jigsaw technique through authentic material. Then, the researcher chose the second grade because the reading material of second grade was suitable for this research (magazine). After that, the researcher used questionnaire as the instrument to collect the data. There were 30 questions in the questionnaire and the researcher measured the reliability and validity before collecting the data.

RESULTS AND DISCUSSION

Table 1.The Decrease of Students' Anxiety in Each Class.

No.	Class	Pre-Questionnaire	Post-Questionnaire	Decrease
1.	Experimental Class 1	26.82	16.11	10.71
2.	Experimental Class 3	25.76	16.02	9.74

From the table above, there is a difference decrease of the value of students' anxiety in two classes. In experimental class 1, the decrease of students' anxiety was 10.71. Then, in experimental class 2, the decrease of students' anxiety was

9.74. It can be inferred that the highest decrease value of students' anxiety was in experimental class 1. It was when the researcher gave treatments using jigsaw technique. Besides, the lowest decrease value was in experimental class 2, it was when the researcher gave treatments using jigsaw technique through authentic material. It can be concluded that the decrease value of experimental class 1 was higher than other classes.

1. **The Decrease of Students' Anxiety in Experimental Class 1**

One-Sample Test

	Test Value = 0					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Pre	104.820	29	.000	26.46667	25.9503	26.9831
post	52.087	29	.000	16.13333	15.4998	16.7668

In table 1, it shows that the sig.(2-tailed) was 0.00. It means that there was a difference between the mean of pre-questionnaire and post-questionnaire in experimental class 1 or the class that was given treatment using jigsaw technique to decrease students' high anxiety. It can be concluded that the students' anxiety was lower after the implementation of jigsaw technique.

After giving the treatments, the researcher gave post-questionnaire to the students in the next meeting. Then, it was found that students' anxiety became better than before giving the treatment. The students were active and enthusiastic to follow the teaching learning process. Based on Timothy (2011), he states that a collaborative learning environment makes students feel more comfortable with each other and reduce anxiety. In this case, the finding of experimental class 1 was in line with that theory of Timothy (2011). The students' anxiety was better

than before after the researcher gave treatments using jigsaw technique. Based on the students' statement they were afraid to ask the teacher when they have problems in the classroom. But, the researcher found after she used jigsaw technique in experimental class 1, the students were more freely to ask their problems to their friends or teacher. It is clear that jigsaw technique reduced the feeling of afraid because the students had a chance to learn a material from their friends in a group. Then, cooperative learning is meant to provide the learners with a chance to learn material from their group.

In jigsaw technique class the students learned a material together with their friend in a group. Each student has the same opportunity to learn a material and they can ask their friend if they do not understand with the material. Zahra (2014:67) states that jigsaw technique allows students to work in groups which have different races and cultures and it can support minority students in achieving their academic success. So, if there is no difference between the students, their anxiety will be good because they will not think that their friend is their rival. But, they will think that their friend is their partner to learn the material together. They were not nervous to share their idea or ask a question if they did not understand. All students are equal in jigsaw technique class because they learned the material together and if they have a problem so they can teach each other. Furthermore, Jigsaw technique can be used as teaching tool in teaching process. In this case, the students showed they had no a worry to learn the material and they enjoyed in learning. It is clear that it influences the students' anxiety in classroom because when they have enjoyment to learn so that their anxiety will be low.

Cooperative technique make the students become more kind to each other while developing their empathic powers (Aronson, 2000:51 and Barrat, 1992:75 cited in Gocer, 2010:442). It is hoped the students will help their friends to learn the

material if they know their friend cannot understand the idea clearly. In this case, if the students have empathic powers, they will appreciate their friends' idea or arguments about the material. As the researcher found that the student discussed the idea about the text that they read together with their friends until they found the conclusion. Then, when their friends had a problem in the material, they helped them to learn the material. So, it has a close relationship with empathic powers. The students' anxiety will be good if they know that their friends appreciate all their ideas and their friends will help them if they have problem to understand or comprehend the material.

Moreover, there is no competition in jigsaw technique class because all students are hoped to be expert of their own material. Every student has the same opportunity to be expert in jigsaw technique. So, each student will not think that their friends are their rival for them. But they will think that their friends are a place for discussing or sharing the idea that they got from the text. Then, the students are given the same portion of the total learning task master and then teach that segment to the other members of their team. Based on Ali (2001:1) and Timothy (2011:3), they found that jigsaw technique can lower students' anxiety. So, it is possible to use jigsaw technique in order to make the students' anxiety become lower.

Beside that, in experimental class 1, the researcher used textbook as the material that given to the students. As we know that, the language of textbook is more familiar for the students than the language of authentic material. Baghban and Ambigapathy (2011:6) state that constructed materials are advantageous because they use more familiar structures and words. The students can understand each word or sentence easily if they are familiar with the words. Then, modified material is among the effective way that can be used in teaching learning process.

This material can also be effective way for learners to study English and this material will be motivating for learners. Modified material contains more simple words, appropriate language, grammatical, vocabulary, and readable needed by the learner. So, it was also a factor that support students to have a low anxiety because the students did not find a big problem to understand the text since the text contains simple words and readable. It can be concluded that jigsaw technique is an effective way to reduce students' anxiety.

2. The Decrease of Students' Anxiety in Experimental Class 2

One-Sample Test

| | Test Value = 0 | | | | | |
| | T | Df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
					Lower	Upper
pre	82.528	29	.000	25.86667	25.2256	26.5077
post	56.696	29	.000	16.06667	15.4871	16.6463

In table 2, it also shows that the sig.(2-tailed) is 0.00. It means that there was a difference between the mean of pre-questionnaire and post-questionnaire in experimental class 2 or class that was given treatment using jigsaw through authentic material technique to decrease students' high anxiety. It can be concluded that the students' anxiety was lower than before.

After giving the treatment, the researcher distributed post-questionnaire to them. However, the students' anxiety in second class had the lowest decrease than other classes. The students were not anxious to follow the teaching learning process when the teacher implemented jigsaw technique. Because the students became center in the classroom and they could ask their friends if they had problem. It

was same with the finding of the research in experimental class 1. The students became more active and enthusiastic to follow the class. But, when the researcher used authentic material, the students found some difficulty to understand some words. It is caused authentic material contains some difficult words. Although, the students were motivated to read the story because they would find a new story and the layout was more interesting than common material, but they found some difficulty in understanding some uncommon words the text. It was different with experimental class 1, the researcher implemented jigsaw technique but the material that was used by the researcher was textbook/LKS.

As Sukirlan (2012:6) states authentic material contains difficult language. So, the students needed many vocabularies to understand the text because they would not be familiar with the vocabulary. But, in this case the researcher implemented jigsaw technique where the students became center in the classroom. So, the students can freely ask their friends about the difficulty that they got in the text. Besides, there is no competition in jigsaw technique, so the students' anxiety will be lower than before since all students have the same opportunity in mastering the material. Then, authentic material is effective in teaching reading because the students will get new information and new knowledge from all aspect of life. The students were enthusiastic to read the text because they knew that they would find a new story in authentic material. Although, they would find some difficult words but they solved it by open the dictionary or asked to their friends.

Based on Ali (2001:1) and Timothy (2011:3), they found that jigsaw technique or cooperative activity can lower students' anxiety. Then, these findings are in line with the finding of this research. The students' anxiety became lower after the implementation of jigsaw technique through authentic material. So, it is possible to use jigsaw technique through authentic material in order to make the students'

anxiety became lower. But, the teacher also should consider the selection of the material to support low students' anxiety. As in the experimental class 1, the researcher implemented jigsaw technique but she used textbook. Then, the students' anxiety decreased highest, but in textbook the students may not find many new vocabulary since it used simple and familiar vocabulary. Baghban and Ambigapathy (2011:6) state that constructed materials are advantageous because they use more familiar structures and words.

Besides, they said that some story in textbook had been known by them. Although, the students found unfamiliar words, but the students could find new vocabulary, clues, and new interesting story. It was proved by the students find many difficult words and they looked for the meaning in dictionary or asked their friends. Then, the students said that they have not read about the story yet. So, the teacher should be wise in choosing the material for the students. However, it is possible to add authentic material when the teacher wants to implement jigsaw technique in the classroom.

3.The Difference of Students' Anxiety in Two Classes

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	41.333	3	13.778	3.368	.022
Within Groups	351.790	86	4.091		
Total	393.122	89			

The table 3 above shows that the significant value is 0.022. It means that there is a difference of students' anxiety between those given treatments using jigsaw techniques and those using jigsaw techniques through authentic material. If the

value of probability significant is upper than 0.05, it means that there is no difference between students' anxiety in two experimental classes. Then, if the value of probability significant is lower than 0.05, it means that there is a difference between students' anxiety in two experimental classes. Based on the result above, it can be seen that the value of probability significant is lower than 0.05 (0.022), it means that there is a difference between students' anxiety in two classes.

CONCLUSION

Based on the results of the research, it can be concluded as below:

1. Jigsaw technique seems to reduce students' high anxiety since the students were more active in the classroom after the researcher implemented jigsaw technique to make students' anxiety better.

2. Besides, the use of jigsaw technique through authentic material seems to reduce students' high anxiety. Although students got some difficulty in understanding the text of authentic material, but the students were active and enjoyed after the researcher implemented jigsaw technique through authentic material.

3. There is a significant difference of students' anxiety between those given treatments using authentic material, those using jigsaw techniques, and those using jigsaw technique through authentic material. Jigsaw technique was the best in lowering students' high anxiety and authentic material had the lowest decrease of students' high anxiety after the researcher implemented it.

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