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Research paper



Mobile Instant Messaging and Its Potential to Reduce Anxiety in English as a Foreign Language Speaking Class

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Abstract

This study examines of students' speaking anxiety, self-efficacy, speaking achievement and their feeling about the activities conducted using WhatsApp activities in English as a Foreign Language speaking class. Three instruments used to collect the data in this study were the questionnaire, speaking test and interview. The data were analyzed by using descriptive statistic to find out the level of students speaking anxiety and self-efficacy. The multiple regressions were to investigate the relationship between variables and two-way ANOVA to know the significant differences between the variables and interview to get information about mobile application activities through focus group discussion. The integration of Smartphone in teaching and learning English can effectively reduce the students' speaking anxiety, and makes a good score in speaking English as a Foreign Language. Furthermore, the researcher finds that foreign language speaking anxiety was statistically predicted students' speaking achievement. The decreasing in speaking anxiety means the increase in students' speaking achievement. Finally, students indicated if they are eager to continue using WhatsApp for enhancing their speaking abilities as a part of classroom activities for the future.

Keywords: *EFL speaking anxiety; Mobile assisted language learning; Speaking Achievement; Speaking Self-Efficacy*

1. Introduction

One problem that often appears in English as a foreign language (EFL) instructions in Senior high school of East Kalimantan, especially teaching, speaking skill, is the limited time allocated for English subject, which is most effective eighty minutes according to assembly. The researcher has collected the twelve grade students' previous speaking score when they were in the eleventh grade. The researcher found that most of them got low scores in speaking course. From those scores, the researcher believes that many of the students seem like having some difficulties in developing their speaking skill even they have learnt speaking course since in the tenth grade. Based on the issue above, the teachers should always consider the possibility of anxiety as the responsibility for the students' behaviors before attributing students' poor performance and achievement are caused by lacking of ability or poor motivation (Horwitz, Horwitz, and Cope, 1986). This anxiety will also make students feel less enjoyable in learning process (Gregersen, 2005). It will make the students become passive in the class and unwilling to practice their speaking. As a result, the anxious students get the most difficulties in developing speaking skill, achieving higher score in speaking or participating in English class. There are already many studies reported that speaking anxiety has negative correlation with students' performance or proficiency (Ewald, 2007; Liu and Jackson, 2008). High level of anxiety is assumed to be relevant with low achievement and low level of anxiety is relevant with high achievement. However, the result is not always the same in different personality, background, and culture. Based on the theories previous, the students' difficulties in developing speaking skill and achievement could be influenced by their speaking anxiety and self-efficacy. In handiest eighty minutes, teachers should be capable to use it to teach four language skills at once. This is not sufficient time if it ought to include the exercise, because the class size is huge, which usually consist of 30 to 40 students in a class. With the limited time provided for each meeting makes it almost impossible to cover all students to do the exercise. In such a short length of time students is pushed to practice speaking in front of the class with a very limited time to prepare. This results in the problems to control their fear and stress.

Based on the issue above, the teachers should always think about the possibility of fear and stress as the responsibility for the students' behaviors. This fear and stress will also make students feel less enjoyable in the learning process (Gregersen, 2005). It will make the students become passive in the class and unwilling to practice their speaking. As a result, the nervous students get the most difficulties in developing their speaking skill, achieving higher scores in speaking or participating in English class. So, there are two major problems in teaching, learning and speaking English as a Foreign Language: the limited time gave out for teaching speaking and the students' fear and stress. In this research, the researchers are going to investigate whether the integration of technology in teaching, speaking can be a solution to both problems.

Associated with trouble above, studies in-side the subject of technology have counseled that the use of technology can improve the teaching and learning process, especially in teaching English as an overseas Language (Machmud, 2017). On this research, researcher using one of technology tools in mobile application. The ICT tools are including computers, radio, television, Smartphone and some different gadgets, and among the ICT tools that is mostly owned and broadly used is Smartphone. Mtega, Bernard, Msungu, and Sanare (2012) defines "Smartphone have a capability of enhancing the teaching and learning processes as the tools are reasonably priced in comparison

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to different ICTs which can be used for teaching and learning". Smartphones became one of the tools that can be used in teaching process because most of the students use smartphone in their every day.
Primarily on the arguments above, the researcher decided to investigate whether the use of Smartphone that is included into the teaching and learning speaking subject can reduce students' anxiety and whether it can overcome the problem of limited time allocation for teaching speaking. If both issues can be solved by using of the mobile application, it is expected that the students' learning achievement in speaking English can be increased.

2. Purpose of the study

More specifically, the research questions of this study are the following:
1. What are the levels of foreign language speaking anxiety and self-efficacy of students?
2. What are the relationships between foreign language speaking anxiety, self-efficacy and students' speaking achievement?
3. How do the students feel about the WhatsApp experience?

3. Methodology

This is a mixed-research study. The researcher used correlational research design as the quantitative research approach. Correlation study is done to figure out the relationship among two or more variables and to explore their result for cause and effect without giving cause and effect result (Fraenkel, Wallen, 2012). In this research design, the quantitative data included responses in the FLSAQ, speaking self-efficacy scale and students' speaking exam while the qualitative data included a focus group discussion with students. According to Fraenkel and Wallen (2012), a sample of at least 50 is considered necessary to establish the existence of a relationship. Based on that explanation, the researcher chose 52 students from the total of population.
In collecting the data, the researcher used questionnaires as the instrument. The questionnaires that used in this study were FLSAQ and speaking self-efficacy scale. The researcher had provided the explanation of the instruments. Foreign Language Classroom Anxiety Scale (FLCAS) was used to measure students' foreign language anxiety level. The FLCAS involved fear of negative evaluation, communication apprehension and test anxiety aspects (Horwitz, Horwitz, and Cope, 1986). The original items of FLCAS are 33 items. However, in this study the researcher selected 18 from the original 33 items in order to find out specifically in students' foreign language speaking anxiety aspect. Then, the instrument that used to measure the students' speaking anxiety was Foreign Language Speaking Anxiety Questionnaire (FLSAQ). Furthermore, to find out the students' self efficacy level, the researcher adapted a Speaking Self-Efficacy Scale from Asakereh and Dehghannezhad (2015). This scale was adapted into self-report measure of self-efficacy. The researcher adapted it into 10 items with Likert scale. The total score was calculated by finding the sum of the all items.
The procedures that have been done to collect the FLSAQ questionnaire score, speaking self-efficacy questionnaire score, and speaking exam score. The researchers gave the FLSAQ and speaking self-efficacy questionnaire to students. The researchers gave the students time to complete the questionnaire in around 30-40 minutes. The questionnaires distributed in Bahasa version. The researcher was helped by some experts to check the researcher's back translating result for the English version questionnaire into Bahasa version questionnaire. Then the scores of students FLSAQ and speaking self-efficacy questionnaire were calculated. Each of the students' scores from FLSAQ and speaking self-efficacy questionnaires were ranged from the highest to the lowest to find speaking anxiety level and self-efficacy level. A few days after the students speaking exam, the researchers asked the students' final score to the teacher. Then, the researcher analyzed the correlation between the three variables. Then, the result of the quantitative data were interpreted.
In addition, the students attended WhatsApp activity classes for ten weeks. The "WhatsApp" software is proposed as a device to encourage participation and interaction during the course through the creation of groups in which different users can interact through text, voice, images and video-sharing. Exchanges between users can be produced in a synchronous or asynchronous manner, way to the voice recording system given by the application and are received on phones as alerts.
All the students participated in the activity, as they all had smartphones as well as the previously downloaded "WhatsApp" application. After the creation of the "WhatsApp" group, the activity was carried out taking into account a series of premises established by the teacher: writing was forbidden in order to force learners to speak; English language use was required; a different question had to be created by a different group of student every day; the choice of topic for the question was open; each student had to provide at least one answer per question; image-sharing was allowed; The response were shared, so that apart from learning from their own response they could learn from each other. The teacher participated actively in the activity and errors were not corrected in a clear manner during the interaction.
Furthermore, focus group discussion was conducted with fifty-two students which divided into five groups. They were interviewed about the feelings they experienced during the activities of WhatsApp. The interview was conducted in Bahasa Indonesia, the students' native language, to ensure the results were accurate and complete. These interviews were recorded and then transcribed.

4. Results and Discussion

Finding of the study were devoted to present the result and analysis of the study. The findings were used to answer research questions in this study. The research questions in this study were quantitative research questions. The quantitative research questions were "What is the level of foreign language speaking anxiety and self-efficacy for the students?" and "What is the level of foreign language speaking anxiety and self-efficacy for the students?". The quantitative data of this study were students' FLSAQ total score, students' speaking self-efficacy scale total score, and students' speaking achievement score. Thus after gaining students scores, the researcher was calculating the scores by using descriptive statistics and multiple regression analysis in Statistical Package for the Social Sciences (SPSS).

4.1. Quantitative data analysis descriptive

The data of the students' speaking anxiety were obtained from the calculation of the FLSAQ.

Table 1: The scores of students' FLSAQ

Number of students	Classification
5	**High**
23	**Moderate**
24	**Low**

As shown in table 1, 46.15% students classified into low level of speaking anxiety, 44.2% students classified into moderate level of speaking anxiety and 9.6% students classified into high level of speaking anxiety. The mean score for overall score in students' FLSAQ was 39.5. It meant most of students in this study experienced between low and moderate level of speaking anxiety.

4.1.1. The students' self-efficacy level

Table 2: Score of Speaking Self-Efficacy Scale

Number of students	Classification
5	**High**
23	**Moderate**
22	**Fair**

Based on the table 2, we could also see that 1.92% student identified to have low self-efficacy level, 57.6% students identified to have moderate self-efficacy level and 40.3% students identified to have high self-efficacy level. It meant that most of the students have enough believed in their own ability.

4.1.2. The students' speaking exam score

The table below showed the students' speaking exam score that have been collected from speaking teacher.

Table 3: Speaking exam score before use Whatsapp

Number of students	Classification
3	**High**
12	**Moderate**
37	**Fair**

As shown in table 3, most of the students got the score in range of 60 until 69 (71.1%). Only 5.76% students classified to get excellent scores and 23.07% students classified to get good scores. The mean score for students speaking exam was 67.36. It meant students' speaking skill in this study were classified into fair category.

Table 4: Speaking exam score after use Whatsapp

Number of students	Classification
20	**High**
31	**Moderate**
1	**Fair**

As shown in table 4, most of the students got the score in range of 60 until 69 (2%). Only 38,4% students classified to get excellent scores and 60% students classified to get good scores. It meant the students' speaking skill in this study was classified into moderate category.

4.1.3. The relationship between speaking anxiety, self-efficacy and speaking achievement

In finding out the relationship between the three variables, the researcher used multiple regression analysis from SPSS. It analysed the relationship between the three variables, namely, foreign language speaking anxiety, self-efficacy and speaking achievement.

Table 5: Correlation between speaking anxiety, self-efficacy & speaking achievement

Variable	Unstandardized coefficient (B)	Standardized coefficient (β)	t value	Sig.
Anxiety	-.193	-.358	-.744	.008
Self-efficacy	.211	.188	1.446	.155

Table 5 showed that speaking anxiety was statistically significant ($p<.05$) with speaking achievement, but self-efficacy was not statistically significant with speaking achievement. Speaking anxiety ($\beta=-.358$, $p=.008$) is significant and its coefficient is negative indicating that the greater of students to experience speaking anxiety, the lower speaking achievement that students will get. However, it should be emphasized that speaking anxiety is not causing lower speaking achievement. The self-efficacy ($\beta=.188$) is not significant ($p=.155$) and the coefficient is positive. It would indicate that the greater students' self-efficacy level is related to higher speaking achievement. However, of the two predictor variables, speaking anxiety was the most powerful predictor ($\beta = -.358$, $t = -2.74$). As for self-efficacy, it was shown that self-efficacy could not be the predictor of students' speaking achievement which is indicated by its p-value.

ANOVA results table 6, showed that there was the statistically significant difference in students' speaking achievement level according to their speaking anxiety level and self-efficacy level. It meant that the researcher rejected the null hypothesis.

Table 6: Two-way ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	221.085	2	110.542	5.011	.010[b]
Residual	1080.973	49	22.061		
Total	1302.058	51			

a. Dependent Variable: Speaking

b. Predictors: (Constant), speaking self-efficacy, FLSAQ

4.2. Qualitative data analysis results

This section includes an analysis of the focus group discussion conducted with the sub-sample of fifty-two interviewees in Bahasa Indonesia. First, the voice-recorded interviews were transcribed by one of the researchers. Then, the researcher translated the students' responses from Bahasa Indonesia to English. The other researcher of this study double checked both the transcriptions and translations. The aim of conducting the interview in the learners' native language (e.g. Bahasa Indonesia) was to encourage more de-tailed responses. Finally, the analysis was made based on repeating themes following Gay, Mills and Airasian's (2012) coding and classifying approach. These analyses were used to answer the following research question: How do the students feel about the WhatsApp experience?

The analysis of the students' feelings about the WhatsApp activity experience indicated that they mostly liked the idea of using WhatsApp in the classroom and they felt that it contributed to their language performance. Some results from the interviews are below:

1. Actually, I do not think it made me gain some experience. I was just a part of it because you want me to do it. I do not think it added anything to me. I try to say words accurately and clearly. [Student of group A]
2. I think it was helpful and very productive. Hearing my own voice after that over and over again helped me improve myself. [Student of group B]
3. I assume it progressed our speaking, and pronunciation. It made us see and understand ourselves in a higher manner. [Student of group C]
4. I think this have a look at was clearly excellent. I improved my pronunciation, and I accelerated making sentences. Now I suppose I will make conversations with my friends in English confidently. I think it is a superb interest. [Student of group D]
5. I have a very positive perception about it. Using such social application in education is genuinely good. It can help us enhance our speaking and make us gain more self-confidence. I pay attention a number of my friends talking about how they overcame such issues thanks to this activity. [Student of group E]

Next, students were asked to indicate the thing that affected them most during the experience.

1. It created an opportunity for listening to their voice-recordings ourselves and this enabled them to find mistakes. [Student of group A]
2. Listening to my own voice afterwards over and over again, and the fact that different people concentrate on the way I communicate affected me the most. [Student of group B]
3. It helped me talk well, and it made me understand my mistakes as I listen to myself. [Student of group C]
4. First of all, my pronunciation receives quicker and improved. In preference to wondering, I speeded up making sentences in speaking sentences. I preferred it. [Student of group D]
5. I had pronunciation problems. Before we recorded our speaking, we had the assist of our teacher to correct us. Then, we recorded ourselves after we practiced those pronunciations. Consequently, it helped me correct my pronunciation [Student of group E]

The first research question concerned to the level of students speaking anxiety and self-efficacy. For speaking anxiety, the finding indicated that the majority of students were experiencing low until moderate level of speaking anxiety. It ilustrated that they found learning the rules to speak English fluently as the most stressful factor in speaking. It was supported by the finding from Horwitz, Horwitz and Cope (1989) that stated the rule numbers of language that students need to learn as one of the predictors for students anxiety and suggested students were unable to deal with the task of language learning. However, it was emphasized that afraid to be laughed by friends or get negative evaluation as the top reason behind the students' anxiety. The differences in identifying the top reason behind students' anxiety could contribute to the differences between the students criteria as participants in each study. Based on the explanation above, the researcher assumed that the students in this study have more tendency to experience test anxiety. It could inhibit students to study efficiently and make them just focus in getting the best score instead of an oppurtunity for communication and language improvement (Tsiplakides and Keramida, 2009). Moreover, the students' familiarity with classmate and their English basic knowledge could still make some differences in identifying their anxiety level and the reasons behind it. In addition to speaking anxiety level, the researcher also revealed that the majority of students were experiencing moderate level of self-efficacy. It also indicated that they have some awarness that the efforts to practice more are needed for improving their speaking score. It was supported by the finding from Sharma and Nasa (2014) that stated students with higher self-efficcay will perform better cognitive engagement. The second research question concerned on the relationship between foreign language speaking anxiety, self-efficacy and speaking achievement. The result showed negative relationship between speaking anxiety and speaking achievement, but positive relationship between self-efficacy and speaking achievement. The negative relationship between foreign language speaking anxiety and students' speaking achievement in this study also supported with the results obtained by Woodrow (2006) that indicated speaking anxiety has significant negative relationship with speaking achievement and it can predict oral performance of English language. Moreover, it stated that students felt more comfortable to speak English outside the class rather than giving an oral presentation in class. It can be used to support the researcher's assumption about the students' tendency to experience test anxiety.

Finally, students indicated if they are eager to continue using WhatsApp for enhancing their speaking abilities as a part of classroom activities for the future.

5. Conclusion

To sum up, the integration of Smartphone in teaching and learning English can effectively reduce the students' speaking anxiety, and this makes a good score in speaking English as a Foreign Language. Furthermore, the researcher finds that foreign language speaking anxiety was statistically predicted students' speaking achievement. The decreasing in speaking anxiety means the increase in students' speaking achievement. However, self-efficacy in this study could not be used to predict the students speaking achievement.

Moreover, the students stated that the experience in using WhatsApp gave them a chance to listen to their voice-recordings themselves and have their recordings evaluated by a classmate and teacher, for this reason enabling them to self-evaluate by questioning their mistakes. Moreover, from the perspective of educational practice, this research present facts on the topic of the MALL. It additionally gives evidence about the use of mobile phones contribute to an improvement of educational outcomes particularly promoting learning. As such, it helped students to individualize their learning.

For the next researcher, they can use this finding as a literature to guide them to do the similar topic. The researcher also suggests to the future researchers who want to investigate about speaking anxiety and self-efficacy to use different instruments or different designs. They also can give more focus to test anxiety that the students experienced.

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