Exploring Picture Series, Students Motivation and Gender Toward Speaking Achievement

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Abstract

The media utilized in the teaching and learning process should adapt to the circumstances and settings, as well as be compatible with the abilities of the students. The media industry has a common need for creative men and women who can effectively communicate information and ideas via words and visuals. This study was aimed to found out: whether or not there were an influence of interaction among picture series, motivation and gender toward speaking achievement. Method of this research used quantitative with factorial 2x2x2 design approach. There were 60 students as sample, 30 students for experimental group and 30 students for control group. The sample was taken by using purposive sampling., the data were collected by using speaking test and questionnaires. To verify the hypotheses, the data were analyzed by using three-way ANAVA. Based on the data analysis, the result of three-way ANAVA showed that the interaction between: 1) the experiment and control classes obtained significant values = 0.001 < 0.05, the first hypothesis was acceptable, 2) the male and female genders obtained significant values = 0.367 > 0.05, the second hypothesis cannot be accepted, 3) high and low motivation obtained significant value = 0.085 > 0.05, the third hypothesis is unacceptable, 4) class and gender obtained significant value = 0.820 > 0.05, the fourth hypothesis is not acceptable, 5) class and motivation obtained Significant value = 0.669 > 0.05, then the fifth hypothesis is unacceptable, 6) Gender and motivation obtained Significant value = 0.015 < 0.05, then the sixth hypothesis is acceptable, and 7) the interaction among class, gender and motivation was obtained Significant value = 0.380 > 0.05, the seventh hypothesis was unacceptable. Thus, it could be concluded that there was no interaction between class, gender and motivation for speaking achievement scores.

Keywords: picture series, gender, students’ motivation, speaking achievement
Introduction

The media used in the teaching and learning process should adapt to the situation, conditions and be in harmony with the student’s abilities. The media share the common needs of creative minded men and women who are able to effectively use words and images to convey information and ideas. Media are the components of a learning resource, or the physical means of having materials in a learning location that can stimulate student learning (Grow et al., 2018; Puspitarini & Hanif, 2019 & Abdulrahaman et al., 2020).

The purpose of media is to facilitate communication (Arts et al., 2022; Ansari & Khan, 2020; Chatterjee & Kar, 2020 & Mheidly & Fares, 2020). But media can provide students with a visual experience during learning, simplify complex concepts, and embody abstractions. In addition, media made lessons more interesting. Media is a crucial part of helping students understand the lesson (Dwijayani, 2019; Pranoto, 2021 & Page et al., 2022). Learners and teachers need media that support the teaching and learning process. Media are carries of information whether a source and a receiver. Because of that, media is everything used to deliver a message to the receiver from the sender to stimulate and motivate the students. Therefore, every teacher should be selected and decided in choosing media to increase students’ achievement. (Pranoto et al., 2021; Abdulrahaman et al., 2022 & Prestridge, 2019).

Pictures are often used to present situations to help students work with grammar and vocabulary (Pratiwi & Ayu, 2020; Suban, 2021 & Tian et al., 2020). Based on this statement, it is clearly stated that pictures help the students easily to get information, and helps the students work with grammar and vocabulary. Moreover, picture series can be used in the English learning and teaching since it helps students comprehend the text, get information easily and helps students toward working with grammar and vocabulary (Abdelrady, 2022; Ismatullayeva, 2020; Maulidar et al., 2019 & Masuram & Sripada, 2020).

Speaking is a fundamental of communication (Hussain, 2017; Bogdashina, 2022 & Stewart et al., 2021). It played a very crucial part in peoples’ daily life, almost of every aspect in our life is covered by speaking. To most people, mastering speaking is one of the most important aspects of learning a second or foreign language, because
the purpose of learning a language was to be able to communicate by using a language (Rustamov & Mamaziyayev, 2022).

Many theorists given different definitions of speech. Participants negotiate the implications of their ideas and feelings and agree on who should said what to whom about what (Ulva, 2019; Yan et al., 2019 & Myers-Scotton, 2020). In other words, speaking helps our listeners understand our expressions (Jara-Ettinger et al., 2020). In short, speaking was a person's ability to express to others their thoughts, feelings, or whatever is on their mind.

So, defines that speaking was a language skill that is developed in a child's life. This speaking skill could be obtained through the ability to listen and then be understood and then spoken by someone with the interlocutor who understands each other.

Teaching speaking aims to give basic knowledge for the students to be able to communicate with others. The mastery of speaking skills in English is a priority for many foreign-language learners (Farabi et al., 2017; Rao, 2019; Wahono & Zahro, 2021 & Muhi & Dajang, 2022). Consequently, learners often evaluate their success in language learning as well as the effectiveness of their English course on the base of how much they feel they have improved in their spoken language proficiency. It means that speaking becomes the most important skill to be mastered in English a foreign language (Kamal et al., 2021; Iminahunova, 2021 & Liando & Tatipang, 2022).

Some previous researches that similar with this research found in “Improving the Speaking Skills by Using Picture Series grade eighth of MTs Wahid Hasyim Yogyakarta in academic year of 2013/2014.” After running a picture series, students' mean scores increased in terms of accuracy (Malichah, 2014). Also, in “The Effect of Using “Find the Differences” Picture on Students’ Speaking Achievement of MTs Ma’arif Balong Ponorogo in academic year 2016/2017 “. Result of this research were significant difference to the students’ speaking achievement before and after using “Find the Differences in Picture Series” “(Tri, 2017). Then, in “The Students’ Motivation in Learning English Vocabulary by Picture Series in first grade at SMK Negeri 1 Sungai Loban”. The result of this research by questionnaires, the researcher's interpretation was high for each point intrinsic, and motivation in learning English vocabulary by series picture was good and had high (Ningrum, 2021).
In his book entitled What Could He Be Thinking, Michael Guriaan How a Man’s Mind Really Works (2005, p. 23) explains that the factors that distinguish male and female brains are the size, interaction, and function of each part. Meanwhile, Viirtio et al., (2021), the main differences that distinguish the genders are as follows: 1) spatial differences: Males have more developed brains and more spatial complex skills, such as mechanical designing, directional measurement abstraction, and physical object manipulation. No wonder men over tinkering vehicle, 2) Differences in language: There are many sucks to perform in more male cerebral cortical regions. Functions Spatial and inclined functions allocate a tiny percentage of its cortex to the area responsible for word creation and usage. cluster of brain left-to-right or corpus collosum connected nerves The brains of men are one-fourth smaller than those of women, 3) Female brains can use both hemispheres to their full potential whilst male brains only use the right. Women are more talkative than men because of this. According to the survey, women use about 20,000 words daily, compared to men’s 7,000 words, and 4) Fewer memories: The memory center (hippocampus) is larger in women’s brains than in men. This may provide an explanation for why men forget things readily while women recall everything.

Based on previous research, the researcher strongly believes that the use of picture series can give significant influence and significant motivation students’ on speaking and increase the students’ score because this strategy has been widely used by previous researchers and was successful. so, the research question: whether or not there was an influence of interaction between: 1) picture series and speaking achievement, 2) motivation and speaking achievement, 3) gender and speaking achievement, 4) class and gender toward speaking achievement, 5) class and motivation toward speaking achievement, 6) gender and motivation toward speaking achievement, and 7) among class, motivation, and gender toward speaking achievement.

**Research Methodology,**

This study utilized a quantitative approach with experimental research and a 2x2x2 factorial design. The data was analyzed using three-way ANAVA, which considers the possibility of variable moderators that impact the dependent variable or treatment variable against the dependent variable or result (Sugiyono, 2019;
Meijburg, 2022; Subiyantari et al., 2019; Berlyana & Purwaningsih, 2019 & Ardiana & Ananda, 2022). The design was as follows:

<table>
<thead>
<tr>
<th>Learning Motivation (Y)</th>
<th>Learning Method (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Picture Series (X1)</td>
</tr>
<tr>
<td></td>
<td>Conventional (X2)</td>
</tr>
<tr>
<td>Male (A1)</td>
<td>Female (A2)</td>
</tr>
<tr>
<td>Students Learning High Motivation (Y1)</td>
<td>X1Y1A1</td>
</tr>
<tr>
<td>Students Learning Low Motivation (Y2)</td>
<td>X1Y2A1</td>
</tr>
</tbody>
</table>

Source by Tuckman 1999 cited in Adriyani (2017) Conducting educational research

Note:
X1 : Group of students taught with Picture Series method
X2 : Groups of students taught with the Conventional method
Y1 : Highly motivated groups of students
Y2 : Groups of students who have low motivation
A1 : Male student group
A2 : Female student group
X1Y1A1 : Male student group who are taught with Picture Series method and have high motivation
X1Y2A2 : Female student group who are taught with Picture Series method and have low motivation
X2Y1A1 : Groups of male students who are taught by conventional methods and have high motivation
X2Y2A2 : Female student group who are taught with conventional methods and have low motivation

This research conducted at SMA Negeri 6 Palembang. The subjects were the Eleventh Grade of SMA Negeri 6 Palembang in academic year 2023/2024, in this research the researchers used purposive sampling. The purposive sampling technique was a non-random technique that didn’t need underlying theories or a set number of participants and the researcher decides what needs to be known and sets out to find people who can and were willing to provide the information by virtue of knowledge or experience (Etikan et al., 2016; Obilor, 2023; Mulisa, 2022 & Pace, 2021). To obtain a sample, the writers select two classes with the same teacher with 60 students as samples. To collected the data, the writers used questioner and test and analyzing data, the writers used normality test, homogeneity test, and tree-way ANAVA.

Findings and Discussion,
Findings
1. Normality Test

The data from the speaking test results follow through a normality test to see if they are distributed properly, based on how many samples the writer gave to verify the normalcy test. Table 2 displays the results of the normality test; it’s obvious:

### TABLE 2

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>df</td>
<td>Sig.</td>
</tr>
<tr>
<td>for Speaking</td>
<td>.083</td>
<td>.200*</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The significance coefficient (sig.2-tailed) of the Kolmogorov-Smirnov test is 0.200, in accordance with the results of the normality test at the residual value of speaking achievement. It can be determined that the data have a normal distribution if the significant coefficient is higher than 0.05.

2. Homogeneity Test

In order to determine whether or not the data had the same variances, the writers examined the homogeneity of speaking achievement for the control and experimental groups as well as motivation and gender. The variances are significantly different in each group if the significance level is less than 0.05 (Field, 2009). The results of the homogeneity test are shown in Table 3:

### TABLE 3

<table>
<thead>
<tr>
<th>Test of Homogeneity of Variance</th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized Residual</td>
<td>.631</td>
<td>1</td>
<td>58</td>
<td>.430</td>
</tr>
<tr>
<td>Based on Mean</td>
<td>.481</td>
<td>1</td>
<td>58</td>
<td>.491</td>
</tr>
<tr>
<td>Based on Median</td>
<td>.481</td>
<td>1</td>
<td>57.709</td>
<td>.491</td>
</tr>
<tr>
<td>Based on trimmed mean</td>
<td>.565</td>
<td>1</td>
<td>58</td>
<td>.455</td>
</tr>
</tbody>
</table>
Based on the data on the Table 3 above, it could be seen that the significant value of homogeneity test was 0.430 and it was higher than 0.05. Therefore, it indicated that the data had the same variances.

3. Three-way ANAVA

The writers administered three-way ANAVA to measure the progress of student’s motivation and toward speaking achievement after being taught by picture series strategy. It was used to find out whether or not there was influence of interaction among picture series gender, and motivation on speaking achievement. Table 4 presents the results of three-way ANAVA that answer the research questions, they were as follows:

<table>
<thead>
<tr>
<th>Tests of Between-Subjects Effects</th>
<th>Dependent Variable: Speaking Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Type III Sum of Squares</td>
</tr>
<tr>
<td>Corrected Model</td>
<td>320.992</td>
</tr>
<tr>
<td>Intercept</td>
<td>79243.490</td>
</tr>
<tr>
<td>Class</td>
<td>78.033</td>
</tr>
<tr>
<td>Gender</td>
<td>5.700</td>
</tr>
<tr>
<td>Motivation</td>
<td>21.144</td>
</tr>
<tr>
<td>Class * Gender</td>
<td>.360</td>
</tr>
<tr>
<td>Class * Motivation</td>
<td>1.274</td>
</tr>
<tr>
<td>Gender * Motivation</td>
<td>43.189</td>
</tr>
<tr>
<td>Class * Gender * Motivation</td>
<td>*5.389</td>
</tr>
<tr>
<td>Error</td>
<td>357.364</td>
</tr>
<tr>
<td>Total</td>
<td>143359.870</td>
</tr>
<tr>
<td>Corrected Total</td>
<td>678.357</td>
</tr>
</tbody>
</table>

a. R Squared = .473 (Adjusted R Squared = .402)

1. Because the experiment and control classes obtained significant values = 0.001 < 0.05, the first hypothesis was acceptable. Thus, it could be concluded that there was a difference in speaking achievement scores between the experimental class and the control class.

2. Since the male and female genders obtained significant values = 0.367 > 0.05, the second hypothesis could not be accepted. Thus, it could be concluded that there was no difference in speaking achievement scores between male and female students.

3. Since high and low motivation obtained significant value = 0.085 > 0.05, the third hypothesis was unacceptable. Thus, it could be concluded that there was
no difference in speaking achievement scores between students with high motivation and students with low motivation.

4. Since the interaction between class and gender obtained significant value = 0.820 > 0.05, the fourth hypothesis was not acceptable. Thus, it could be concluded that there was no interaction between class and gender on the value of speaking achievement.

5. Due to the interaction between class and motivation obtained Significant value = 0.669 > 0.05, then the fifth hypothesis was unacceptable. Thus, it could be concluded that there was no interaction between class and motivation for the value of speaking achievement.

6. Due to the interaction between gender and motivation obtained Significant value = 0.015 < 0.05, then the sixth hypothesis was acceptable. Thus, it could be concluded that there was an interaction between gender and motivation for the value of speaking achievement.

7. Since the interaction among class, gender and motivation was obtained Significant value = 0.380 > 0.05, the seventh hypothesis was unacceptable. Thus, it could be concluded that there was no interaction between class, gender and motivation for speaking achievement scores.

Discussion

There were several discussions that could be formed based on the research findings. First, the picture sequence method significantly improved the student’s speaking achievement. It could be due to the implementation of a picture series strategy, which encourages students to participate actively during the lecture. It was consistent with Tri Lestari, (2017), who claims that visuals can stimulate the use of language in productive abilities such as speaking and writing. In research method she used quantitative with pre-experimental design and t-test to analyses the data and got there was significant difference to the students’ speaking achievement before and after using” Find the Differences” picture to the seventh-grade students of MTs Ma’arif Balong Ponorogo in Academic year 2016/2017. It was based on the data analysis data where the result t-value is 5.1066 and the t-table in 5% significance stage is 2.09. it means that t-value is higher than t-table. So, Ha is accepted and H0 is Rejected.
Besides, the use sustained “Find and Differences” Picture as technique for treat the VII B class is increase the students’ speaking achievement. It is shown by the mean of pre-test and post-test. The mean score of pre-tests before using “Find the Differences” picture technique is 53.84 and the mean post-test after using “Find and Differences” picture is 66.10.

Second, it was discovered that there was a substantial difference between the experimental and control groups in terms of achievement after treatment, because their score improved before and after treatment. Ningrum, (2021), this research used the Quantitative research by questionnaires to discover the students’ motivation in learning English vocabulary by series picture. This research used slovins’ formula, so from 133 students just 100 student who be the sample in this Thesis. The analyzed the data from questionnaire filled by participants by using SPSS 21 program to find out the descriptive statistical analysis. Descriptive statistics such as means, frequency, standard deviation, and percentage were used to find out the students’ perception and then to analyzed data questionnaires used Likert scale. According the analyze data in the research, the researcher found the data intrinsic the students’ motivation in learning English vocabulary by series picture. The students had intrinsic motivation, learning English and picture series. As a consequence of this questionnaire research, the researcher’s interpretation for each point intrinsic was high, and motivation by series picture was good and had a high. It could be related to the findings that students taught using the image sequence technique were more engaged and driven to talk than students who were not. Anggun Wulandari, (2021) share the result of her study, quasi experimental research was used. There were 46 students as sample, 23 students for experimental group and 23 students for control group. The sample was taken by using purposive sampling. The data were collected by using speaking test. To verify the hypotheses, the data were analyzed by using Paired Sample T-test and independent Sample T-test. The calculation was done by running SPSS program. Based on the data analysis, it was revealed that there was a significant improvement of students’ speaking skill. It was proved by the result of paired sample t-test with t obtained (15.029) was higher than t-table (1.574) and the significant value (0.00) was lower than α (0.05). It indicated that students’ speaking skill was improved. In addition, the result of independent sample t-test showed that t-obtained (3.225) was higher than t-table (2.015) and the significant value was (0.02) was lower thanα (0.05). It indicated that there was a significant difference in students’
speaking skill between those who were taught by using one minute talk technique and those who were not.

Finally, there was no connection between learning approach and student motivation to achieve speaking success. Purwanti and Putra, (2019) discovered no relationship between motivation and learning results in the experimental and control classes in their study. This type of research is experimental research with experimental design factorial design. The results showed that (1) There were differences in student motivation, experimental class and control class. This is evidenced by the average learning motivation of the experimental class students is higher than the control class (87.00> 79.00). (2) There is a difference in reading comprehension that concludes the contents of children's stories between students who get learning with the CIRC model with animated videos with those that do not. This can be proven from the results of the two-party test analysis using SPSS version 23 obtained data for reading comprehension competence concluded the contents of children's stories based on the distribution list t obtained t-count> t table (2.836> 1.960) and the significance level of 0.005 <0.05, it can be concluded that Ho is rejected and Ha is accepted. This means that there is a difference in reading comprehension which concludes the contents of children's stories between the experimental and control classes. (3) CIRC models with animated videos are more effective in increasing students' motivation and reading comprehension abilities. This is evidenced by the t test which shows that the significance level is <0.05, which is 0.00 <0.05, then Ha is accepted. (4) There is no interaction between motivation and learning outcomes in the experimental and control classes. The F test results show that both CIRC models and animated videos and CIRC alone with motivation influence the learning outcomes together. However, the test results of the significance of individual parameters (statistical t test), the significance level is more than 0.05, so it can be concluded that motivation is not a moderator variable

The novelty of this research was the researchers added 1 gender variable, which was supported by a 2x2x2 factorial research design with ANAVA three-way analysis, and obtained results that greatly influenced student speaking achievement; thus, the gender variable is also required in experimental research to determine the significant difference in the capability between male and female students.

Conclusion
Based on the results and discussion of the seven research hypotheses, the researchers obtained, a new explanation and assessment was obtained in this study that the picture series, motivation and gender have results and affect the achievement of speaking male students and female students, thus this study can be used as a reference for future researchers by adding gender variables in pure experimental research, not only to get variables that influence each other, but also researchers also get new information related to habits, and problems that are often faced by male students and female students with low learning motivation and high learning motivation prove that there are very significant differences between them. thus, this research gets something new by using a 2x2x2 factorial design research approach which is analyzed with three-ways ANAVA.

References


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Saputri, et al. (2019). Exploring Picture Series, Students Motivation and Gender Toward Speaking Achievement

Subiyantari, A. R., Muslim, S., & Rahmadyanti, E. (2019). Effectiveness of Jigsaw cooperative learning models in lessons of the basics of building construction on students learning outcomes viewed from critical thinking skills. *International Journal for Educational and Vocational Studies, 1*(7), 691-696. [https://doi.org/10.29103/ijevs.v1i7.1653](https://doi.org/10.29103/ijevs.v1i7.1653)


