CHAPTER IV
RESEARCH FINDINGS AND DISCUSSION

In this chapter, there are research results which are final calculations in a meta-analysis study *Audio-Lingual Method* learning by determining the effect size value on English speaking skills, and how much influence the *Audio-Lingual Method* learning model has based on previous research and discussion of research data according to the criteria determined by the author.

A. Research Findings

Based on the results of the journal article research that has been conducted by researchers, eighteen article publications were found regarding the effect of *Audio-Lingual Method* on students' speaking skills. The articles that have been included in the inclusion criteria are articles related to *Audio-Lingual Method* learning and speaking skill improvement. The eighteen articles with nineteen effect sizes come from eight journal articles and ten articles from theses.

The data from the 18 journal articles are presented in the following table:

Table 4.1 Research Result Data for Each Article

No.	Code	Author	Experiment			Control		
			N	Mean	SD	N	Mean	SD
1	1A	Sukarman (2022)	18	57,22	13,96	18	36,11	9,16
2	2A	Rahawi (2020)	27	77,93	9,59	27	76,58	11,83
3	3A	Kurniasari (2019)	36	68,47	11,07	36	61,05	11,41
4	4A	Pujiana (2019)	25	77,88	13,06	25	62,12	15,51
5	5A	Amalia (2019)	32	11,34	2,39	32	8,94	1,98
6	6A	Vidhiasi et al (2018)	54	61,78	11,67	54	38,63	11,92
7	7A	Fauzia et al (2018)	40	18,33	5,22	40	12,68	3,97
8	8A	Rofiqi (2018)	32	74,31	5,95	32	57,76	8,98

9	9A	Nurhilaliyah (2017)	30	78,25	8,39	30	72,9	9,52
10	10A	Hermanto (2016)	35	75,2	6,42	38	69,47	7,63
11	11A	Arti (2014)	34	72,59	6,23	34	66,82	5,10
12	12A	Khetaguri A (2016)	40	72,48	10,63	40	65,14	14,26
13		Khetaguri B (2016)	40	72,69	10,85	40	68,74	15,18
14	13A	Safitri et al (2019)	32	72,88	4,00	32	57,38	6,06
15	14A	Tugiyatun et al (2021)	15	78,07	16,43	15	55,4	20,97
16	15A	Soni (2018)	22	2,81	0,63	22	1,65	0,29
17	16A	Kadiatmaja (2022)	12	79,92	3,60	12	63,92	7,59
18	17A	Mochtar (2021)	12	72,08	8,32	12	58,75	3,76
19	18A	Fransiska et al (2016)	36	70,22	1,26	36	65,75	1,05

1. Effect Size results all data based on category

Based on the previous chapter presented by the author, there are two approaches that can be used to calculate the *effect size*, namely *the Unstandardized Mean Difference* and *The Standardized Mean Difference.* The approach used in this research is the *Standardized Mean Difference* approach because the data in the table shows that the dependent variable in eighteen journal articles has different assessment scales; some use a 0–10 scale and some use a 0-100 scale. At this phase, the *effect size*, variance, and standard error values of the *effect size* are obtained.

The *effect size* data of published journal articles on *Audio-Lingual Method* Learning are based on the effect size category, consisting of three criteria: small effect ($0.01 < \eta^2 \leq 0.09$), medium effect ($0.09 < \eta^2 \leq 0.25$), and large effect ($\eta^2 > 0.25$), as shown in the following table:

Table 4.2 Effect Size Data Based on Effect Size Category

No.	Articles Code	Number of sub Effect Size	Effect size	Variance ES	Standard Error ES	Category Effect Size	Articles Total
1	2A	1	0,124	0,073	0,270	Small	2
2	12A	2	0,296	0,050	0,224		
3	3A	1	0,653	0,058	0,241	Medium	4
4	9A	1	0,589	0,069	0,262		
5	10A	1	0,801	0,059	0,242		
6	12A	-	0,578	0,052	0,227		
7	1A	1	1,748	0,152	0,39	Large	13
8	4A	1	1,082	0,091	0,301		
9	5A	1	1,079	0,071	0,266		
10	6A	1	1,949	0,054	0,233		
11	7A	1	1,207	0,059	0,242		
12	8A	1	2,146	0,098	0,313		
13	11A	1	1,002	0,066	0,256		
14	13A	1	2,982	0,132	0,363		
15	14A	1	1,171	0,153	0,391		
16	15A	1	2,324	0,152	0,39		
17	16A	1	2,601	0,307	0,554		
18	17A	1	1,994	0,247	0,497		
19	18A	1	3,813	0,157	0,396		

The results of the data analysis in the table show that there are two journal article publications with small *effect sizes*, four journal article publications with medium *effect sizes*, and seven journal article publications with large *effect sizes*.

2. Summary Effect of Data

After getting the *effect size* results for each article, the research procedure continues by calculating the summary effect value for the entire article. There are two types of statistical models for calculating summary effect values, namely *fixed effect models* and *random effect models*. The function of each statistical model was mentioned by researchers in the previous chapter.

To calculate the summary effect value, researchers used the JASP program. JASP (*Jeffreys's Amazing Statistics Program*) is a software tool used to obtain summary effect values, heterogeneity test results, forest plots, and publication bias analysis. The data used as input in JASP software are the *effect size* and standard error of *effect size*, which are obtained through Microsoft Excel calculations, which are presented in the table above.

The following are the analysis results obtained after inputting data into JASP software:

a. Heterogeneity Test

Table 4.3 ***Heterogeneity Test Results***

Fixed and Random Effects

	Q	df	p
Omnibus test of Model Coefficients	42.328	1	< .001
Test of Residual Heterogeneity	296.052	18	< .001

Note. *p* -values are approximate.

Note. The model was estimated using Restricted ML method.

The results of the analysis in Table 4.3 show that the nineteen effect sizes of each article are heterogeneous (Q = 296.052; p < 0.001). Thus, the random effect model is more suitable for estimating the average effect size of the eighteen articles analyzed. The results of this analysis also show the potential to investigate other variables.

b. Summary Effect/ Mean Effect Size

Table 4.4 Summary Effect

Coefficients

					95% Confidence Interval	
	Estimate	Standard Error	z	p	Lower	Upper
intercept	1.449	0.223	6.506	< .001	1.012	1.885

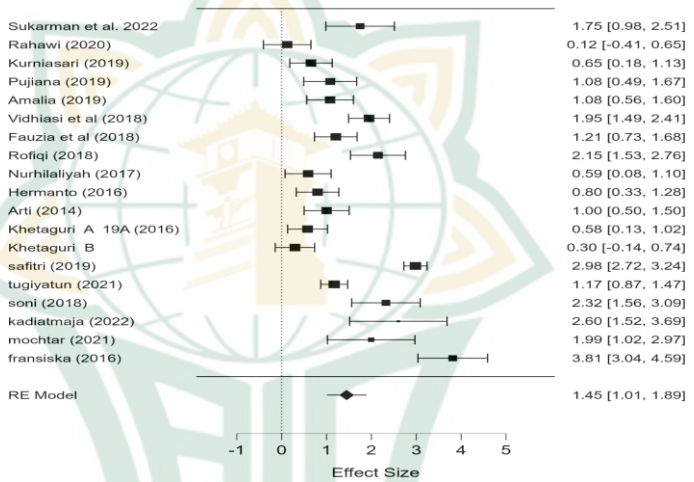
Note. Wald test.

The results of the analysis in the **table 4.4** using the *random effect model* show that there is a significant positive influence on the use of the *Audio-Lingual Method* learning model in improving students' speaking skills (z = 6.506; p <0.001; 95% Cl (1.012; 1.885).

The influence of the *Audio-Lingual Method* learning model on students' speaking abilities is included in the large category (M = 1.449).

c. Forest Plot

Picture 4.1 Forest Plot



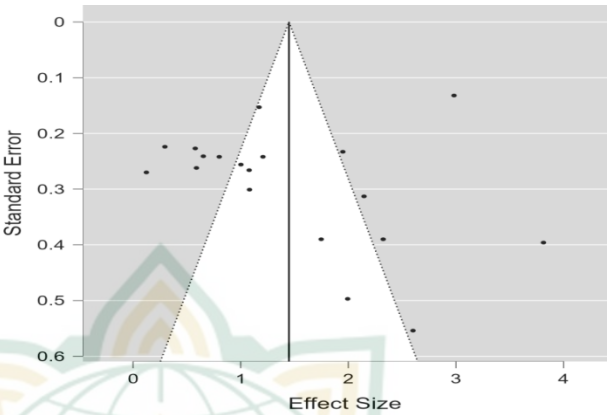
Picture 4.1 is the result of a forest plot, which is a summary of the results of the meta-analysis that researchers have carried out. Based on **picture 4.1**, the results of the meta-analysis consist of the *effect size* results and confidence intervals for each article and the summary effect results. So, from the forest plot image, it can be observed that the effect size results for each article analyzed have varying magnitudes from 0.12 to 3.81.

d. Bias Publication Analysis

To detect publication bias in the results of meta-analysis research that has been carried out, researchers use several methods, as follows:

1) Funnel Plot

Picture 4.2 Funnel Plot



2) Rank Correlation and Egger Test

The **picture 4.2** above is the result of a funnel plot formed from several articles that have been tested for bias (publication bias). To find out whether the research results indicate publication bias or not, it can be seen from the results of the funnel plot, namely whether it is symmetrical or not.

The X axis on the funnel plot shows the sample size (*effect size),* while the Y axis is the variant (standard error). Research with large sample sizes is located at the top of the graph, while samples with small values are located at the bottom. This is because small samples have smaller standard error values than large samples. This can make it easier to identify asymmetry in research. Asymmetry in forest plots can occur because there is research that is not included in the forest plot.

However, the loss of several articles in the forest plot has no impact on the statistical values or only impacts the appearance. Therefore, it is difficult to conclude whether the results of the funnel plot are symmetrical or not. For this reason, we need the help of other methods, namely the Egger test and rank correlation.

Table 4.5 Rank Correlation

Rank correlation test for Funnel plot asymmetry

	Kendall's τ	p
Rank test	0.347	0.039

Table 4.6 Egger's Test

File Drawer Analysis

	Fail-safe N	Target Significance	Observed Significance
Rosenthal	3932.000	0.050	< .001

Based on the Egger's Test, it can be seen that p > 0.05, namely 0

3) Fail Safe-N

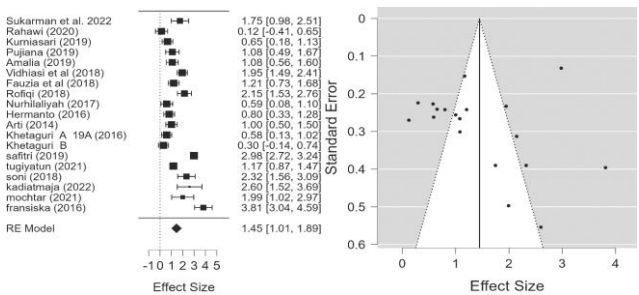
Table 4.7 File Drawer Analysis

	Z	P
Sei	1.822	0.068

The results of the analysis in the **Table 4.7** show that the Fail-Safe N value is 3.932, which means that there are 3932 studies or publications whose results are biased, so these studies were not published. Then the Fail-Safe N value will be compared with the value 5K + 10. Because K = 19, so 5K + 10 = 5(19) + 10 = 105. The Fail-Safe N value obtained is 3932, with a target significance of 0.05 and p < 0.001. Because the fail-safe value N > 5K + 10, it can be concluded that there is no problem of publication bias in the meta-analysis study.

4) Trim-Fill Analysis

Picture 4.3 Trim-Fill Analysis



In the following **picture 4.3**, it can be seen that the results of the forest plot using the Trim-Fill analysis show that the results of meta-analysis do not indicate publication bias. It is because the summary effect results in the forest plot, have not shifted or are less than the summary effect that was previously obtained. Additionally, there are no open circles in the funnel plot indicating missing or unpublished research that should be added.

3. Analyze the results of the moderator variables

a. Educational level

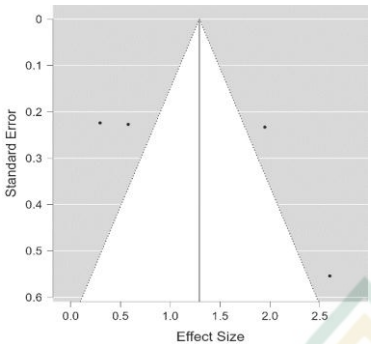
The first analyzed aspect is the large influence of the application of the *Audio-Lingual Method* on improving speaking skills at the junior high school level up to college. The following are the results of meta-analysis for each level that has used the *Audio-Lingual Method* to improve speaking skills.

Table 4. 8 Research Result for Educational Level

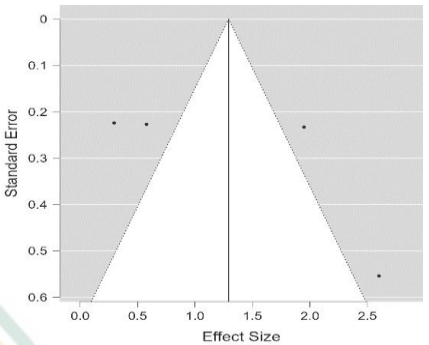
Category	Level	N	Estimate	Kendall's	p-Rank Test	RE Models
Education Level	College	4	1,292	0,667	0,333	1,29 (0,25; 2,33)
	Senior High School	4	1,355	0,667	0,333	1,36 (0,68; 2,03)
	Junior High School	11	1,541	0,147	0,532	1,54 (0,89; 2,19)

Based on the **Table 4. 8**, it can be concluded that the *Audio-Lingual Method* is most effectively used at junior high school level with RE-Models 1.54 which indicates a high category from a data sample of 11 data. Below is a funnel plot at each level:

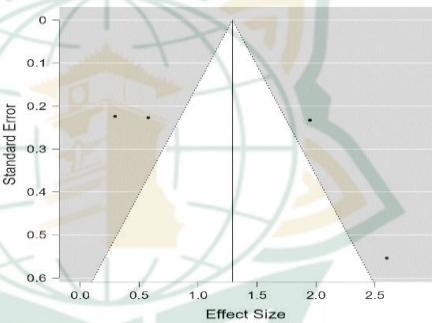
Picture 4.4 College Level



Picture 4.5 Senior High School



Picture 4.6 Junior High School



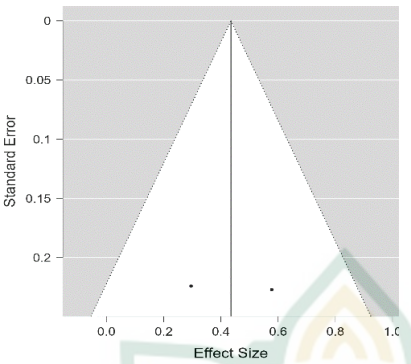
b. Based On Region

Table 4.9 Research Result Based on Region

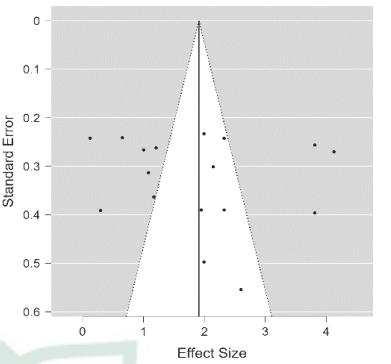
Category	Country	N	Estimate	Kendall's	p-Rank Test	RE Models
Region	USA	2	0,435	1.000	1.000	0,44(0,12; 0,75)
	Indonesia	17	1,911	0,178	0,322	1,91 (1,33; 2,49)

From **table 4.9**, it can be concluded that the *Audio-Lingual Method* is the most effective in Indonesia amount 17 data with total RE Models 1.91 which indicates the high category. This is because *Audio-Lingual* is widely used by countries where English is a second language. So little data is obtained from countries where English is used as a mother language. The following is a funnel plot for each region:

Picture 4.7 USA



Picture 4.8 Indonesia



c. Dependent Variable

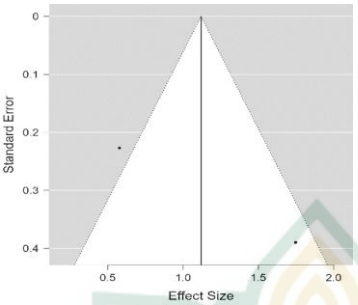
Table 4.10 Research Result for Dependent Variable

Category	Variable	N	Estimate	Kendall's	p-Rank Test	RE Models
Dependent Variable	Accuracy	2	1,120	1.000	1.000	1,12 (-0,02; 2,26)
	Fluency	2	0,540	1.000	1.000	0,54 (0,05; 1,03)
	Pronunciation	3	1,312	0,333	1.000	1,31 (0,43; 2,20)
	Grammar	6	1,166	-0,067	1.000	1,17 (0,49; 1,84)
	Vocabulary	2	2,491	1.000	1.000	2,49 (0,06; 5,04)
	Speaking	4	2,113	-0,333	0,750	2,11 (1,26; 2,96)

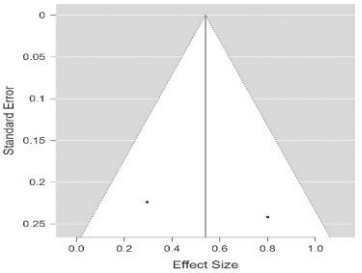
Based on the **table 4.10**, it can be concluded that learning with the *Audio-Lingual Method* has the most influence on speaking because it produces a RE Model of 2.11 which is in the high category. Meanwhile, accuracy, fluency and vocabulary data are considered less valid

because the samples are not sufficient for the amount needed in the calculation

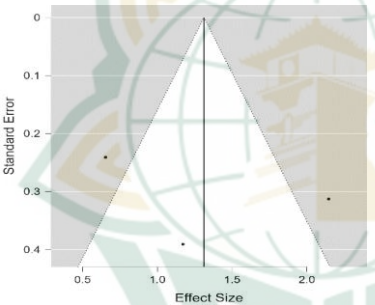
Picture 4.9 Accuracy



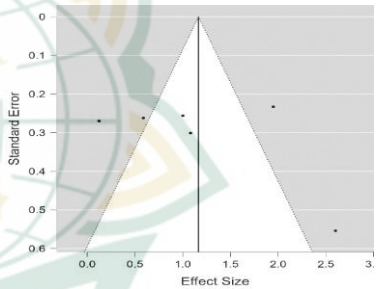
Picture 4.10 Fluency



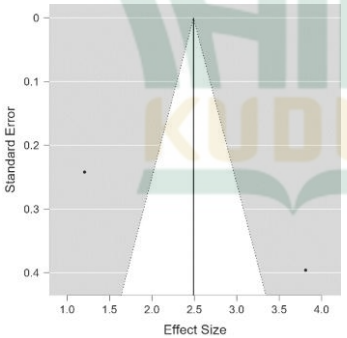
Picture 4.11 Pronunciation



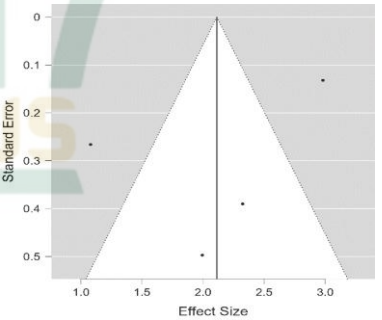
Picture 4.12 Grammar



Picture 4.13 Vocabulary



Picture 4.14 Speaking



B. Discussion

This research discusses how to use the *Audio-Lingual Method* to improve students' speaking skills using the meta-analysis method. To find out the influence produced by this learning, it is necessary to calculate the *effect size* or magnitude of influence so that it can be mapped and analyzed.

Effect *size,* which shows the magnitude of the influence of a treatment or the strength of the relationship between two variables, is

the most important unit in meta-analysis research because it provides information from a summary of the research that has been conducted. By calculating the *effect size* of each study, it can be determined how big the influence of a method on English-speaking learning is. There are seventy journal articles, theses, and proceedings that have been collected and summarized. From the entire journal articles, there are eighteen that meet the criteria, and the *effect size* can be calculated using a predetermined formula.

There are many journal articles that have been published that cannot be included in meta-analysis research due to incomplete data or article criteria required, so these journal articles must be eliminated and meta-analysis cannot be carried out on these articles. The following are the results of the interpretation of several meta-analysis output results carried out using the software JASP 0.16.4.0.

1. **The Influence of the Audio-Lingual Method from All Data**
   a. Hypothesis

      H0: true effect = 0, the application of the *Audio-Lingual Method* has no effect on the development of students' speaking skills

      H1: true effect ≠ 0, the application of the *Audio-Lingual Method* influences the development of students' speaking skills

      After carrying out a heterogeneity test using JASP Q-statistics software, the results obtained show a *Q value* ≥ *df* (296,052 ≥ 19) with a *p-value* < *α* (0.05) so it can be concluded that the results of the meta-analysis of the nineteen *effect sizes* that have been analyzed disparate in different types of populations (*heterogeneous*). Therefore, the *random-effect model* method is more appropriate to use to draw conclusions from the summary effect results compared to the *fixed-effect model*.

      The *Random-Effect Model* shows that there is a significant positive correlation between the *Audio-Lingual Method* and students' speaking abilities (z = 6.506; p < 0.001; 95%) (1.012; 1.885). The correlation results are positive because the results of the summary effect, as shown in the table, indicate that there is no negative sign. Then the p-value is known to produce a value < α, so it can be concluded that the *Audio-Lingual Method* has a significant influence on increasing students' speaking abilities.

      Based on the research findings that have been conducted, the *Audio-Lingual Method* as a whole has a positive

influence on improving students' speaking skills. The average value obtained in data processing is 1.449. This figure is included in the high *effect size* category and shows that the application of the *Audio-Lingual Method* has a high influence on the experiment group's ability to improve speaking.

With *effect size* results, researchers were able to see how effective *Audio-Lingual Method* learning was by using the involvement of a control group as a comparison with the experimental group in each sub-research. The speaking results obtained were an effect or consequence of the treatment given to the experimental group.

b. Publication Bias Test

Publication bias is one of the most important stages in meta-analysis research because if an error occurs in publication bias or the results obtained are invalid, the conclusions from the research that has been conducted are not considered strong in the meta-analysis system. To carry out the publication bias test, researchers used three stages to ensure that this research had no bias.

1) Funnel Plot

A funnel plot is a reading tool used to detect publication bias in meta-analysis research in the form of a scatter plot of all study data that has been carried out by researchers. On **picture 4.1**, the X-axis shows the size of the study effect, while the Y-axis shows the standard error value, and the middle line in the table shows the size of the summary effect.

It can be seen in the table. The funnel plot results from articles that have undergone meta-analysis show that there is no open research (white circles), which means there are no missing studies. This shows that there is no bias in this research. If you pay attention, the 19 studies are distributed symmetrically because almost all parts of the triangle contain research, even though it is concentrated at the top, so it can be concluded that this meta-analysis research does not indicate publication bias.

But it is difficult to determine whether these meta-analysis studies are symmetric or asymmetric. The symmetry of the funnel plot also shows whether the research contains publication bias or not. Based on the funnel plot results in the table, it cannot be shown that

the results of the study are symmetrical or asymmetrical, so the researchers used the Egger's Test.

2) Rank Correlation and Regression Method

Rank Correlation aims to test the relationship between estimates of *effect size* and sampling variance. Meanwhile, the Regression Method (*Egger's Test*) aims to test the relationship between estimates of *effect size* and standard error.[1] In general, the regression method has stronger results than rank correlation.

Based on table. The results of the Egger's Test *p value* show $p = 0.068$ ($p > 0.05$) which can confirm that the funnel plot formed from the *random effect model* is symmetrical. Thus, it can be concluded that there is no problem of publication bias in this meta-analysis study. Meanwhile, the rank correlation shows a positive value (0.347), which indicates that research with large samples was included in this meta-analysis research.

3) Fail-Safe N

Apart from Egger's Test, researchers also use the Fail-Safe N value to determine publication bias in meta-analysis research. Fail-Safe N is an approach suggested by Rosenthal which aims to overcome publication bias by determining the number of insignificant, unpublished (missed) studies that need to be added in a statistically significant meta-analysis to become insignificant. If the number produced by File-Safe N is relatively large compared to the number of studies that have been observed, then researchers can feel quite confident about the results of the research conclusions carried out.[2]

Based on the results of the Fail-Safe N calculation in the **table. 4.8** show a Fail-Safe N value of 3932. This figure shows that there are 3932 insignificant, unpublished (missed) that need to be added to this meta-analysis research to reduce statistically significant observation results to insignificant. To test how strong the Fail-Safe N value is against the threat of bias, Roshental provides guidelines or equations for testing the results of fail-safe N, namely the 5K + 10 equation.

[1] Heri ratnawati, et al, *Pengantar Analisis Meta*, 174
[2] Heri ratnawati, et al, *Pengantar Analisis Meta*, 175

Therefore, the Fail-Safe N value of 3932 will be compared with the value 5K + 10 where the value K = 19. So that the calculation obtained is 5K +10 = 5(19) + 10 = 95 + 10 = 105, this value is smaller than the result of the Fail-Safe N value (Fail-Safe N > 5K + 10). This means that the conclusions that the researchers have made are not affected by publication bias, so that the static results obtained are significant.

4) Trim Fill Analysis

The picture 4.3, Shows that this research does not indicate publication bias. If this research is indicated to be biased, then the summary effect will shift or decrease from the number of summary effects and the number of samples can increase by itself. Trim&Fill uses an iterative procedure to remove the most extreme small studies from the positive side of the funnel plot, recalculating the effect size at each iteration until the symmetrical funnel plot.

A computer program that can combine trim and fill can create a funnel plot that covers observed research with missing research, so researchers can see how effect size shifts when unpublished research is included in analysis.

Picture 4.3 is the output from JASP software version 0.16.4.0 using the Trim and Fill method. In this case, there are no open circles visible in the funnel plot of the *Random Effect Model*, so it can be interpreted that no missing research was found. Therefore, the researchers concluded that the *Audio-Lingual Method* was effective in improving students' speaking skills.

4. Variable Moderator

After conducting research on all journals related to *Audio-Lingual Method* learning to improve students' speaking skills, the researchers found that there were several factors that led to the success of the *Audio-Lingual* learning method. So researchers conduct research on moderator variables or factors that cause heterogeneity in this meta-analysis research.

Researchers found that there were differences in education level, region, and the causes of increasing speaking ability (dependent variable)

a. Influence of Education Level

Based on the table, the research findings show that the application of the *Audio-Lingual Method* to improve students' speaking skills from educational level factors obtained results that were not much different. The *effect size* values at junior high school, senior high school and college levels show figures of 1.541, 1.355 and 1.292. The application of *Audio-Lingual Method* at the three levels of education gives an *effect size* value of $0.80 \leq ES < 1.30$ (high effect) at the college level, while for middle and high school levels it has an *effect size* value of $1.30 \leq ES$ (very high).

This shows that the *Audio-Lingual Method* is an effective learning method and can be applied to the learning process to improve students' speaking skills. Regarding the level of education, the data shows that junior high school education has a higher average *effect size* value than high school and college levels. With *each effect size* difference between middle school > high school (0.186) and middle school > college (0.249), Even though the differences between levels are not too high, it can be concluded that the application of the *Audio-Lingual Method* is more effective when applied to improve English-speaking skills at junior high school.

The high *effect size* value at the junior high school level was obtained due to the involvement of the application of the *Audio-Lingual Method* model with behaviorism theory. In the application of learning, behaviorism theory can be used to train the stimulation or stimulus received so that it becomes a habit that is mastered by students. This behavioristic method is very suitable for acquiring abilities that require practice and habituation, such as speaking, dancing, memorizing, and various attitudes. When applying habits to change speaking habits, this means that students are disciplined and also obey the rules that have been implemented, and the program can run according to the target.[3] This method is more suitable to be applied to train children and teenagers because actions in this theory require repetition, familiarization, and imitation.

b. Influence of Region.

Based on research findings on the use of the *Audio-Lingual Method* from a regional perspective to improve students' speaking with a large average *effect size* of >0.25 in

[3] Ag. Bambang Setyadi, *Teaching English as Foreign Language (2nd ed)*, 44

the Asian region, namely Indonesia with a result of 1.911 and the American region (USA) with a result of 0.782. Based on table. It can be concluded that using the *Audio-Lingual Method* to improve speaking is less effective based on geographic location.

From all the research results that have been studied by researchers, it turns out that Indonesia provides the largest *effect size* compared to the USA. This illustrates that the *Audio-Lingual Method* is most effectively used in Indonesia. However, based on data obtained by researchers, most of the journal articles found came from Indonesia compared to journal articles found in other countries so that Indonesia obtained a larger *effect size* value.

Given this, there are no specific findings to draw conclusions that geographical factors can influence the *Audio-Lingual Method* learning method on speaking results. For this reason, further research is needed regarding the influence of geographical areas on students' speaking results.

c. Effect with dependent variable

Based on the research results in the following table, there is a description of the meta-analysis of the effects of the *Audio-Lingual Method* involving the dependent variable:

1) Accuracy

Based on the table, developing speaking skills has several requirements to be able to master speaking as a whole. One of them is accuracy, *Audio-Lingual Method* learning with accuracy development has a very high *effect size* value, namely 1,120. This value was obtained from calculating the effect size using JASP software, which shows that the overall accuracy data obtained by researchers after calculating the effect size value resulted in a large effect size value category. This indicates that *Audio-Lingual* is feasible and effective to use to improve accuracy in speaking skills.

This is in line with a study conducted by Eko Permadi Sukarman, which in a journal that has been published by previous researchers showed mean students speaking accuracy on pre test of 36.1 then experienced improvement on post-test or after applied *Audio-Lingual*

Method with mean score speaking precision of 57.2.[4] So the results can prove that the use of ALM to improve speaking Accuracy is very effective.

2) Fluency

Fluency is a component in improving speaking. The use of *Audio-Lingual* has a relatively moderate *effect size* value of 0.540. To get this value, the same thing is done with the fluency effect size value, this number shows how big the influence of fluency is in assessing speaking ability. As in the data from research conducted by researchers in the table. This indicates that *Audio-Lingual* can still be used to increase students' fluency even though it has a large *effect size* value.

These results are the same as those published by Dani Hermanto where the speaking fluency results have increased with an experimental value of 75.2 [5]while the control value is 69.47. These results can be categorized as significant because they have improved the students' speaking fluency results

3) Pronunciation

Based on the research results found, it shows that the effect size value of the influence of *Audio-Lingual Method* learning on improving students' speaking in the table shows a large category, namely with an *effect size* value of 1.312. This figure shows that the success rate of the Audio-Lingual Method for developing pronunciation has reached a value of 1.312, so this shows that the success rate of using the *Audio-Lingual Method* is very high. So, we can be sure that the use of the *Audio-Lingual Method* is very effective in improving students' pronunciation skills.

To show proof of the truth of this research, the results of this research are in line with the results of research conducted by Anifatur Rofiqi (2018) where the data shows the mean results from the pre-test with a value of 57.76 and after experiments using the *Audio-Lingual*

[4] Eko Permadi Sukarman, The Use of Audio-Lingual Method in Improving Speaking Accuracy of Indonesian EFL Learners," *International Journal of Multicultural and Multireligious Understanding*, n.d., 734.

[5] "Hermanto, The Effectiveness of Chain Drill Technique in Developing Students' Speaking Fluency, Skripsi UIN Walisongo. 2016. ,p.,1.

Method. mena value increased to 74.31.[6] So this has shown that the *Audio-Lingual Method* has a significant effect in improving speaking pronunciation.

The big impact of learning using the *Audio-Lingual Method* on speaking is due to the application of this method which is quite easy to implement during the learning process, both learning and individual. Because the ALM method has a teacher center concept, all learning materials and understanding gained by students are provided and monitored directly by the teacher.

A learning process like this will make it easier for students to focus their attention on the teacher. Because in learning a foreign language, students are emphasized on pronouncing the words correctly, so by using ALM the teacher can directly correct mistakes made during learning. [7]

4) Grammar

Based on the data table obtained by the researcher, it can be concluded that the *effect size* value in the Grammar results shows a high category value, namely 1.166. The high *effect size* category shows that the ALM method is suitable for developing grammar in students' speaking.

This influence occurs because the ALM (*Audio-Lingual Method*) method uses repetition or drill techniques so that students are able to know and master the sentence patterns that are formed when the teacher is giving examples. By repeating, the sentence patterns that are formed during teaching and learning activities enable students to know what kind of sentence patterns to use in a given situation.

In line with research conducted by Rabika Rahawi (2020) entitled The Effect of Applying Single Slot Substitution Drills Technique Trough Flashcard on Student's Grammar Mastery, it shows that the control value from the research is 76.58. After conducting

[6] "Anifatur Rofiqi The Effectiveness of Using Communicative Drilling On The Eleventh Grade Students' Pronunciation Achievement at MAN 3 Tulungagung2018. Thesis," n.d., 80.

[7] Saepudin, *Introduction to English Learning and Teaching Methodology*, 56

experiments on groups, this value increased to 77.93.[8] Even though there has not been a significant increase, it can be concluded that the use of the Audio-Lingual Method is quite effective in improving speaking grammar.

According to Saepudin, by using the ALM method, students can imitate language patterns many times and more than what they write. By repeating the correct words many times, they can imitate foreign languages well and correctly in a short time. .[9]

5) Vocabulary

Based on the table presented by the researcher, it shows a very high *effect size* value, namely 2.491. The high *effect size* value shows how successful the level of use of a method is, because the *effect size* value reaches 2, the ALM method is very suitable for developing vocabulary in speaking.

Because the ALM method requires students to be able to master the vocabulary given by the teacher so students will get a lot of vocabulary. By memorizing lots of vocabulary, you will get more information.

[8] "Rabika Rahawi, The Effect of Applying Single Slot Substitution Drills Technique Trough Flashcard on Student's Grammar Mastery 2020.Pdf," n.d., p.49.

[9] Saepudin, *An Introduction to English Learning and Teaching Methodology*, 56