

CHAPTER IV

FINDINGS AND DISCUSSION

This chapter is aimed to explain the results of the search and discuss the results of research conducted by researchers. The research was conducted to find out about the effectiveness of the use of the CAKE application to the ability to speak students' afternoon of the class of 2020 at STKIP PGRI Sidoarjo.

A. Finding

1. The Subject Results

This research was conducted at STKIP PGRI Sidoarjo. One of the universities at Sidoarjo. The population used is afternoon English education students at STKIP PGRI Sidoarjo. The sample that will be used is the afternoon English Education students of the class of 2020 with the samples are eleven students. The purpose of the researchers is to use English Education Students as samples because they want to test their English speaking skills in the Class of 2020. Researchers will use a CAKE application as independent learning. So, this research aims to find out about students' ability to speak English before using the CAKE application and after using the CAKE application.

2. The Analysis data

The Analysis of Score's Speaking

In this research, researchers used score retrieval based on assessment indicators in speaking English. As follows:

To get the score of speaking, the researcher will be taking students' score, The table above, it has five aspects of scoring and every aspect has

four points. So, every student will be getting 20 points, from 4 points x 5 aspects. The formula is:

$$\frac{\text{Students' score}}{\text{max. Score}}$$

The criteria of the speaking score are:

| | |
|----------|-------------------|
| A | ≥80 |
| B | ≥66-79,99 |
| C | ≥56-65,99 |
| D | ≥ 40-55,99 |
| E | 0-39,99 |

Then, the result of scoring speaking will be said goal when each student gets score $\geq 66-79,99$ students from score ≥ 80 corresponding standard KKM in the campus. The table that shows the score of speaking students in 2020 afternoon, as follows:

Tabel. 4.1 SCORE OF PRETEST SPEAKING ENGLISH STUDENT 2020 AFTERNOON

| No. | Name | NIM | Categories of Indicators Speaking Assessment | | | | | Total point |
|-----|------|------------|--|---------------|---------------|------------------|---------------------|-------------|
| | | | Comprehension's Ability (1-4) | Fluency (1-4) | Grammar (1-4) | Vocabulary (1-4) | Pronunciation (1-4) | |
| 1. | AAP | 2088293067 | 4 | 3 | 3 | 3 | 3 | 16 |
| 2. | ACD | 2088203030 | 3,5 | 3 | 3 | 3 | 3 | 15,5 |
| 3. | MAP | 2088203064 | 3 | 3 | 3 | 3 | 3 | 15 |
| 4. | EKE | 2088203014 | 3,5 | 3 | 3 | 3 | 3 | 15,5 |
| 5. | MCL | 2088203065 | 3,5 | 3 | 3 | 3 | 3 | 15,5 |
| 6. | KH | 2088203052 | 3,5 | 3,5 | 3,5 | 3,5 | 3 | 17 |
| 7. | RDR | 2088203043 | 3,5 | 3,5 | 3 | 3 | 3 | 16 |
| 8. | FNS | 2088203015 | 3,5 | 3 | 3 | 3 | 3,5 | 16 |
| 9. | LM | 2088203060 | 3,5 | 3 | 3 | 3 | 3 | 15,5 |
| 10 | FL | 2088203048 | 4 | 3 | 3 | 3 | 3,5 | 16,5 |

| | | | | | | | | |
|-----|-----|------------|-----|---|---|---|-----|-----------|
| 11. | NUA | 2088203054 | 3,5 | 3 | 3 | 3 | 3,5 | 16 |
|-----|-----|------------|-----|---|---|---|-----|-----------|

from the table above if summed using the assessment formula, as follows:

Tabel. 4.2 The result Score Pretests of Speaking

| No | Students' Name | Score (Pre-test) | No. | Student's Name | Score (Pre-test) |
|----|----------------|------------------|-----|----------------|------------------|
| 1. | AAP | 80 | 7. | RDR | 80 |
| 2. | ACD | 78 | 8. | FNS | 80 |
| 3. | MAP | 75 | 9. | LM | 78 |
| 4. | EKE | 78 | 10. | FL | 83 |
| 5. | MCL | 78 | 11. | NUA | 80 |
| 6. | KH | 85 | | | |

Tabel. 4.3 SCORE OF POST-TEST SPEAKING ENGLISH STUDENT 2020 AFTERNOON

| No. | Name | NIM | Categories of Indicators Speaking Assessment | | | | | Total point |
|-----|------|------------|--|---------------|---------------|------------------|---------------------|-------------|
| | | | Comprehension's Ability (1-4) | Fluency (1-4) | Grammar (1-4) | Vocabulary (1-4) | Pronunciation (1-4) | |
| 1. | AAP | 2088293067 | 3,5 | 3,5 | 3 | 3,5 | 3 | 16,5 |
| 2. | ACD | 2088203030 | 3,5 | 3,5 | 3 | 3 | 3,5 | 16,5 |
| 3. | MAP | 2088203064 | 3,5 | 3,5 | 3 | 3,5 | 3,5 | 17 |
| 4. | EKE | 2088203014 | 3,5 | 3,5 | 3 | 3 | 3 | 16 |
| 5. | MCL | 2088203065 | 4 | 3 | 4 | 3,5 | 3 | 17,5 |
| 6. | KH | 2088203052 | 3,5 | 3,5 | 3 | 3,5 | 3,5 | 17 |
| 7. | RDR | 2088203043 | 3,5 | 3,5 | 3 | 3 | 3,5 | 16,5 |
| 8. | FNS | 2088203015 | 3,5 | 3,5 | 3 | 3,5 | 4 | 17,5 |
| 9. | LM | 2088203060 | 3,5 | 3,5 | 3 | 3 | 3,5 | 16,5 |
| 10 | FL | 2088203048 | 4 | 4 | 3 | 3,5 | 4 | 18,5 |

| | | | | | | | | |
|-----|-----|------------|-----|-----|---|---|-----|-------------|
| 11. | NUA | 2088203054 | 3,5 | 3,5 | 3 | 3 | 3,5 | 16,5 |
|-----|-----|------------|-----|-----|---|---|-----|-------------|

The table above if summed using the valuation formula, as follows:

Table 4.4 Post-tests Score's Students Speaking

| No | Students' Name | Score (Post-Test) | No. | Students' Name | Score (Post-Test) |
|----|----------------|-------------------|-----|----------------|-------------------|
| 1. | AAP | 83 | 7. | RDR | 83 |
| 2. | ACD | 83 | 8. | FNS | 88 |
| 3. | MAP | 85 | 9. | LM | 83 |
| 4. | EKE | 80 | 10. | FL | 93 |
| 5. | MCL | 88 | 11. | NUA | 83 |
| 6. | KH | 85 | | | |

Based on the data above that this research data is taken based on the results of English speaking tests. The research instrument used in speaking English is shaped in oral tests which use News materials and the topic to be chosen is in the form of "Reporting News". This test is done twice, namely Pre-test and post-test.

The pre-test was given to students with the number of subjects 11 students out of a total of 36 students. The number taken is only 11 students because when taking data researchers have limited time in the data retrieval. The data obtained by the researchers then conducted a data analysis by conducting a normality test, after which it was analyzed using the *t dependent* test at *Kolmogorov Smirnov* method. In the process of data analysis, researchers will use computer software namely SPSS version 24. The list of data in the form of speaking value of students of the class of 2020 afternoon, as follows:

Tabel. 4.5 The Table of Score's Students Speaking

| No | Student's Name | Score (Pre-test) | Score (Post-test) |
|----|----------------|---------------------|----------------------|
| 1. | AAP | 80 | 83 |
| 2. | ACD | 78 | 83 |
| 3. | MAP | 75 | 85 |
| 4. | EKE | 78 | 80 |
| 5. | MCL | 78 | 88 |
| 6. | KH | 85 | 85 |
| 7. | RDR | 80 | 83 |
| 8. | FNS | 80 | 88 |

| | | | |
|-----|-----|-----------|-----------|
| 9. | LM | 78 | 83 |
| 10. | FL | 83 | 93 |
| 11. | NUA | 80 | 83 |

Based on the results of the data obtained from the pre-test stated that the score of 11 students produced a minimum score of 75 and the maximum score is 85 with an average of 79.55 and a standard deviation of 2,697. Meanwhile, the Post-test has a minimum value of 80 and a maximum value of 93 with an average of 84.91 and a standard deviation value of 3,562.

| Descriptives | | | Statistic | Std. Error |
|----------------------------------|----------------------------------|-------------|-----------|------------|
| Pretest | Mean | | 79,55 | ,813 |
| | 95% Confidence Interval for Mean | Lower Bound | 77,73 | |
| | | Upper Bound | 81,36 | |
| | 5% Trimmed Mean | | 79,49 | |
| | Median | | 80,00 | |
| | Variance | | 7,273 | |
| | Std. Deviation | | 2,697 | |
| | Minimum | | 75 | |
| | Maximum | | 85 | |
| | Range | | 10 | |
| | Interquartile Range | | 2 | |
| | Skewness | | ,593 | ,661 |
| | Kurtosis | | ,954 | 1,279 |
| | Posttest | Mean | | 84,91 |
| 95% Confidence Interval for Mean | | Lower Bound | 82,52 | |
| | | Upper Bound | 87,30 | |
| 5% Trimmed Mean | | | 84,73 | |
| Median | | | 83,00 | |
| Variance | | | 12,691 | |
| Std. Deviation | | | 3,562 | |
| Minimum | | | 80 | |
| Maximum | | | 93 | |
| Range | | | 13 | |
| Interquartile Range | | | 5 | |
| Skewness | | | 1,178 | ,661 |
| Kurtosis | | | 1,656 | 1,279 |

3. The Hypothesis test

In this section, the researcher will perform data analysis to test hypotheses which are done with the Normality test before conducting a *comparative dependent test*. Here are the results of the data distribution normality test.

a. Normality Test

Normality tests are performed to find out if each variable's data is normally distributed. Normality test data was obtained from the results of pre-test and post-test English Education class 2020 afternoon. In managing data for normality tests, researchers use the SPSS version 24 software program *Kolmogorov-Smirnov* test. Data is said to be normally distributed if the calculated significant value is greater than the significant value $\alpha = 0.05$.

When a normality test is performed to analyze an error occurs on the data where the result appears is H_0 rejected which means the data is not normally distributed. Here are the normality test results for the researcher variables:

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|----------|---------------------------------|----|------|--------------|----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Pretest | ,251 | 11 | ,051 | ,910 | 11 | ,245 |
| Posttest | ,249 | 11 | ,054 | ,868 | 11 | ,072 |

a. Lilliefors Significance Correction

According to compare score D_{hitung} and D_{tabel} , that are:

Pretests $\Rightarrow D_{hitung} (0,251) \leq D_{tabel} (0,391)$ then H_0 Accepted so the data is distribution normal.

Posttest=> $D_{hitung} (0,249) \leq D_{tabel}(0,391)$ then H_0 Accepted so the data is distribution normal.

Meanwhile, to determine the significant value, as follows:

Pretest => Nilai sig.(0,051)> 0,05 then H_0 accepted so the data is distribution normal.

Posttest=> Nilai sig. (0,054) > 0,05 then H_0 accepted so the data is distribution normal.

Based on the results of normality testing based on two factors, namely based on the comparison of D_{hitung} and D_{tabel} values and based on significant values using *Kolmogorov-Smirnov* it can be concluded that pretest and posttest values have a normal distribution of distributed data.

b. *t-Dependent test*

The *t-dependent test* is conducted to analyze whether or not there is a difference between the pretest and posttest values. In managing the data for the *t-dependent test*, researchers used the SPSS type 24 software program, namely *paired-sample T-test*. Here are the results of the *t-dependent test*:

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|----------|-------|----|----------------|-----------------|
| Pair 1 | Pretest | 79,55 | 11 | 2,697 | ,813 |
| | Posttest | 84,91 | 11 | 3,562 | 1,074 |

Based on the data produced above that this study used a sample of 11 students from afternoon English education classes. The average score

for pre-test students of English education class = 79.55 and standard deviation = 2,697. Meanwhile, for post-test value = 84.91 and standard deviation = 3,562. As for the results of paired differences, as follows:

| Paired Samples Test | | | | | | | | | |
|---------------------|-------------------|--------|----------------|-----------------|---|--------|--------|----|-----------------|
| Paired Differences | | | | | | | | | |
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | t | df | Sig. (2-tailed) |
| | | | | | Lower | Upper | | | |
| Pair 1 | Pretest- Posttest | -5,364 | 3,585 | 1,081 | -7,772 | -2,955 | -4,962 | 10 | ,001 |

Based on these results shows that for the value $t_{hitung} = -4962$ while to know the results of the decision that states there is or no differences in the value of before and after using CAKE Apps. It can be known by comparing which value to look for that the value. So, researchers use this formula:

$$t_{tabel} = \frac{\alpha}{2}; (n - 1)$$

$$= \frac{\alpha}{2}; (11 - 1)$$

$$= \frac{0,05}{2}; (10 - 1)$$

$$= 0,25;10$$

$$= 2,228114/2,2282$$

Thus, it was found that the result value of the $t_{table} = 2.2282$. based on the value of $t_{hitung} = -4,962$. So, the result based on the rules of decision making is $t_{hitung} < - t_{tabel}$ then H_0 is rejected. While based on the significant value obtained by 0.001 which is less than 0.05 probability value which means H_0 is rejected or Sig Value. $\leq 0,05 = H_0$ Rejected. The conclusion of the data above is the difference in the average results of statistical tests students before and after the use of the CAKE application.

B. Discussion

The results of the above research data show that there is a difference in the value of Pre-test or before using the APPLICATION CAKE and Post-test after using the application CAKE to English language skills students of English education afternoon class of 2020. The data results are derived from power analysis conducted by descriptive statistical testing in the form of minimum value and maximum value. In the pretest assessment or before the use of cake application the highest score of each student is 85 and the lowest is numbered 75 which according to campus KKM standards is when each student gets a score \geq of 66-79.99 students from score ≥ 80 . Therefore, based on KKM standards the campus states that students with a score of 75 will be included in the B grade category while for a score of 85 then the student falls into the category of grade A.

Meanwhile, in the post-test assessment or after the use of the CAKE application to students showed the highest score of 93 and the lowest score of 80, so according to KKM standard, the students get a grade with category A that is getting a score of ≥ 80 . As well as, the results of data analysis with descriptive statistical testing that is mean value, which means post-test value (84.91) greater than pre-test (79.55).

In addition, it is also proven by conducting a *T-dependent* or comparative dependent test which measures the comparison between pre-test values and post-test values. As explained in the analysis above that the results of the *t dependent* (Comparative dependent) test that shown a t_{hitung} value greater than the value of t_{tabel} ($-4,962 < -2.2282$) that H_0 rejected. Based on, the rules of decision making

Rejected means there were differences before and after using CAKE Apps. The results are also proven by significant values obtained by 0.001 smaller from the significance value of 0.05 ($0.001 \leq 0.05$) that Horejected which is the decision that there is a difference before and after the use of CAKE apps on English language skills students 2020 afternoon.

Thus, it can be concluded that there are differences in students statistics test results before and after the use of CAKE application or the effectiveness of using CAKE application on the English language skills of students 2020 afternoon which the application is used to train the ability to speak English language as well as as a medium of speaking exercises independently.

Learning using the CAKE application can also provide motivation and encouragement for students to practice speaking English where the app tells users how to pronounce correctly like native speakers, providing new vocabulary that can be used in speaking English ranging from simple to idiom phrases often used by native speakers. CAKE application is also very interesting that gives the sensation of playing where users will be given a star score if they complete the theme they choose.

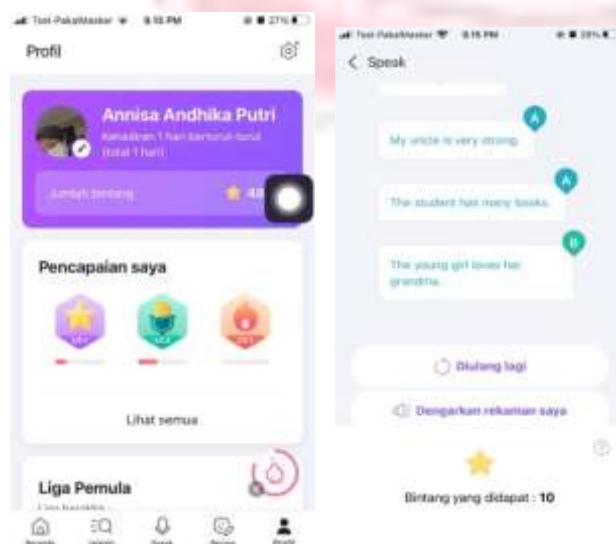


Image 4.1
Students who use CAKE apps