**MOTIVATION TEST**

**(Pre-test and Post-test)**

**Penelitian Efektifitas Aplikasi Tiktok Untuk Meningkatkan Motivasi Siswa Dalam Kemampuan Berbicara**

**Nama:**

**Kelas:**

**Petunjuk:** Beri tanda checklist (√) pada pilihan yang sesuai dengan keadaan anda

*Keterangan:*

1. SS : Sangat Setuju
2. S : Setuju
3. R : Ragu-ragu
4. TS : Tidak Setuju
5. STS : Sangat Tidak Setuju

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Pernyataan** | **SS** | **S** | **R** | **TS** | **STS** |
| 1 | Guru bahasa Inggris disekolah sumber insipirasi saya untuk berbicara bahasa inggris |  |  |  |  |  |
| **2** | Guru menyajikan materi pembelajaran berbicara dengan cara yang menarik |  |  |  |  |  |
| **3** | Guru tidak menyajikan materi pembelajaran berbicara bahasa inggris dengan cara yang menarik |  |  |  |  |  |
| **4** | Saya menantikan untuk kelas berbicara bahasa Inggris. |  |  |  |  |  |
| **5** | Saya lebih suka menghabiskan lebih banyak waktu di kelas berbicara bahasa Inggris  |  |  |  |  |  |
| **6** | Ketika saya memiliki masalah dalam memahami sesuatu di kelas berbicara bahasa Inggris, saya selalu meminta bantuan guru. |  |  |  |  |  |
| **7** | Saya bersemangat belajar saat materi berbicara bahasa inggris |  |  |  |  |  |
| **8** | Saya langsung mengerjakan tugas berbicara bahasa inggris yang diberikan guru |  |  |  |  |  |
| **9** | Saya selalu mempraktikan berbicara bahasa inggris setiap hari |  |  |  |  |  |
| **10** | Belajar berbicara bahasa inggris penting karna akan dibutuhkan saat bekerja |  |  |  |  |  |
| **11** | Kelas berbicara bahasa Inggris saya membosankan. |  |  |  |  |  |
| **12** | Belajar berbicara bahasa inggris tidak menarik |  |  |  |  |  |
| **13** | Saya cenderung menyerah dan tidak memperhatikan ketika saya tidak mengerti penjelasan guru bahasa Inggris. |  |  |  |  |  |
| **14** | Saya menumpuk tugas berbicara bahasa inggris saya |  |  |  |  |  |
| **15** | Saya tidak pernah mempraktikan berbicara bahasa inggris |  |  |  |  |  |
| **16** | Saya merasa percaya diri ketika diminta untuk berbicara di kelas bahasa Inggris saya. |  |  |  |  |  |
| **17** | Saya tenang setiap kali saya harus berbicara di kelas bahasa Inggris. |  |  |  |  |  |
| **18** | Berbicara bahasa inggris itu mudah bagi saya dimanapun saya berada |  |  |  |  |  |
| **19** | Saya tidak pernah merasa cukup yakin pada diri saya ketika saya berbicara di kelas bahasa Inggris. |  |  |  |  |  |
| **20** | Saya merasa gugup jika harus berbicara di kelas bahasa Inggris. |  |  |  |  |  |
| **21** | Saya terkadang cemas bahwa siswa lain di kelas akan menertawakan saya ketika saya berbicara bahasa Inggris |  |  |  |  |  |
| **22** | Saya berharap saya bisa berbicara banyak bahasa inggris dengan baik |  |  |  |  |  |
| **23** | Berbicara bahasa Inggris itu penting karena akan membuat saya lebih nyaman dengan orang-orang yang berbicara bahasa Inggris. |  |  |  |  |  |
| **24** | Saya berharap saya bisa memiliki banyak teman pandai berbahasa Inggris. |  |  |  |  |  |
| **25** | Saya ingin menguasai berbicara bahasa inggris karena akan menunjang karir saya dikemudian hari. |  |  |  |  |  |

(Gardner, 2004)

**Data Sets**

**The Result of Pre-test and Post-test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NO |  X1 pre-test | X2 Post-test | D Difference  | D2 |
| 1 | 78 | 87 | 9 | 81 |
| 2 | 77 | 89 | 12 | 144 |
| 3 | 81 | 93 | 12 | 144 |
| 4 | 79 | 85 | 6 | 36 |
| 5 | 81 | 81 | 0 | 0 |
| 6 | 76 | 90 | 14 | 196 |
| 7 | 71 | 79 | 8 | 64 |
| 8 | 69 | 71 | 2 | 4 |
| 9 | 80 | 85 | 5 | 25 |
| 10 | 87 | 89 | 2 | 4 |
| 11 | 81 | 81 | 0 | 0 |
| 12 | 68 | 88 | 20 | 400 |
| 13 | 83 | 82 | 1 | 1 |
| 14 | 81 | 87 | 6 | 36 |
| 15 | 83 | 86 | 3 | 9 |
| 16 | 71 | 79 | 8 | 64 |
| 17 | 84 | 85 | 1 | 1 |
| 18 | 81 | 86 | 5 | 25 |
| 19 | 78 | 83 | 5 | 25 |
| 20 | 86 | 83 | 3 | 9 |
| 21 | 81 | 84 | 3 | 9 |
| 22 | 82 | 89 | 7 | 49 |
| 23 | 76 | 90 | 14 | 196 |
| 24 | 77 | 92 | 15 | 225 |
| 25 | 77 | 87 | 10 | 100 |
| 26 | 85 | 81 | 4 | 16 |
| 27 | 80 | 85 | 5 | 25 |
| 28 | 80 | 79 | 1 | 1 |
| 29 | 78 | 74 | 4 | 16 |
| 30 | 81 | 78 | 3 | 9 |
|  |  |  |  |  |
| 31 | 82 | 85 | 3 | 9 |
| 32 | 88 | 92 | 4 | 16 |
|   | $\sum\_{}^{}X^{2}=$2542 | $\sum\_{}^{}X^{2}$=2705 | $\sum\_{}^{}d$=195 | $\sum\_{}^{}d^{2}$ = 1939 |
|  | *M₁* = 79.43 | *M₁* = 84.53 |   |   |

## The mean score of Pre-test and Post-test

The total pre-test score of tenth-grade students was 2542, with a total of 32 students. As a consequence, in order to calculate the mean score, the writer divides this score by the total number of students in the group. The following is the formula that was used to determine the mean score:

*M₁* = $\frac{∑x\_{₁}}{N}$

*M₁* = $\frac{2542}{32}$

*M₁* = 79.43

The total post-test score of fifth-grade students is 1,308, with a total of 16 students. As a consequence, in order to calculate the mean score, the writer divides this score by the total number of students in the group. The following is the formula that was used to determine the mean score:

*M₂*= $\frac{∑x\_{₂}}{N}$

*M₂* = $\frac{2705}{32}$

*M₂* = 84.53

## The different score of pre-test and post-test

The Total score of the pre-test of the learning group is 2542. Thus, the mean score is 2542:32 = 79.43. Meanwhile, the total score of the post-test of the learning group is 2705. Therefore, the mean score is 2705:32 = 84.53.

After determining the difference between the pre-test and post-test scores of the students, the following formula was used to determine the interval of the mean score between the two tests:

The table of computations can be seen in (Appendix 4)

MD = 84.53-79.43

MD = 5.1

## The Calculating of t-value

To answer the first question using a t-test, the writer presented the data of the pre-test and the post-test to evaluate whether or not there was a significant effect on the students' speaking motivation after the students were treated using the TikTok application. The t-test score is 5.86. The t-test calculation can be seen below.

$$t= \frac{5.1}{\sqrt{\frac{750.72}{992}}}$$

$$t= \frac{5.1}{\sqrt{0.75}}$$

$$t= \frac{5.1}{0.87}$$

$$t= 5.86$$

$$t= \frac{MD}{\sqrt{\frac{\sum\_{}^{}d2-\frac{(\sum\_{}^{}d)^{2}}{N}}{N(N-1)}}}$$

$$t= \frac{5.1}{\sqrt{\frac{1939\frac{195^{2}}{32}}{32(32-1)}}}$$

$$t= \frac{5.1}{\sqrt{\frac{1939\frac{38025}{32}}{32(31)}}}$$

$$t= \frac{5.1}{\sqrt{\frac{1939-1188.28}{992}}}$$

To find out how probably it is that the writer is right or wrong when they tell that the null hypothesis is rejected. The writer needed to set the probability level. The level of significance can be set at 0.05 mean 95% confidence interval. Thus, the writer set the probability level at 0.05. Based on the t-test formula, the t-obtained value that the writer gets is 5.86. The writer checked the t-distribution table of significance (t-table) 5% with degree of freedom (df) = N1 -1, the writer found: df = 32-1 = 31. Since the result of df was 31, then the t-table value is 2.03 at 0.05 level. It means the t-test was bigger than the t-table (5.86>2.03). The significant difference can be interpreted that the students’ achievement in students’ motivation in learning the speaking skill was significant after being taught by the TikTok application.

## Hypothesis Testing

The obtaining t-value is 5.86. It is higher than the t-table (5.86>2.03). At a degree of freedom 31 (df = 31) and at 95% of confidence (p=0.05). It means that motivating students in learning speaking skills using the TikTok application to Year-10 students’ of SMA Negeri 1 Sungai Raya in Academic Year 2021/2022 has significantly increased the students’ motivation in learning speaking skills. Thus, it proves that the alternative hypothesis (There was a significant difference between the result of pre-test and post-test students’ English speaking motivation by using TikTok application) is accepted and the null hypothesis (There was not a significant difference between the result of pre-test and post of the students’ English speaking motivation by using TikTok application) is rejected.

## The Calculating of Effect Size

After getting the t-test, the author must use the effect size formula to determine the significance of the difference between the pre-test and post-test after being treated by the Tiktok application on students' speaking motivation in order to answer the second research question. The score of effect size is 0.9. The computation of the effect size score is calculated below.

$ES = t\sqrt{\frac{1}{N}}$

$ES = 5.86\sqrt{\frac{1}{32}}$

$ES = $5.86 $\sqrt{0.031}$

$ES = $(5.86) (0.17)

$ES =$ 0.99

As shown in the above computation, the effect size is 0.99. by referring to Daniel (2004, p. 145) criteria in deciding effect size (see table 2), the result obtained is more than 0.8 (ES>08), which is considered as very strong effect size. It can be concluded that the TikTok application very strongly affected students’ motivation to learn speaking skills.