

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter discussed about the statistical result of the study in the form of description and tables. The finding of the study gathered from the questionnaire and documentation form.

A. Result of study

1. Presentation of Data

a) The Result of Questionnaire Data

As stated in the previous chapter (chapter III), the questionnaire was the main instrument in this research, it was used by researcher to collect data related to the variable X (night competition program).

In this research, the researcher carried out the researcher at the BBEC student of boarding school Mambaul Ulum Bata-bata Palengaan, Pamekasan and gave them questionnaire. There is only one meeting in spreading out the questionnaire, the meeting was held on the 17 September 2021 at 15.00 until 16.00. the meeting covered two stage of activities, namely (1) checking the students name list, (2) spreading out the questionnaire. In this case, the data which are obtained from the questionnaire will be analyzed by using statistical method. Actually, the data obtained from questionnaire is not in numerical form. Then the researcher changed the data to be in numerical form by giving score of each questionnaire items.

Furthermore, the researcher also present the score of students response by giving the questionnaire, it is presented in the form of table seen as follow:

- a. The score of answer (a) is 3
- b. The score of answer (b) is 2

c. The score of answer (c) is 1

It is aimed to get data about variable X (night competition program).

Table. 1

Distribution table of questionnaire Answer related to night competition program

No	Students' Alternative answer										Sum of questionnaires alternative answer		
	1	2	3	4	5	6	7	8	9	10	a	b	c
1	a	a	a	c	a	a	b	b	c	a	6	2	2
2	a	a	b	c	c	c	a	c	b	b	3	3	4
3	a	b	a	a	a	a	a	a	a	a	9	1	0
4	a	a	b	b	a	a	c	b	a	b	5	4	1
5	a	a	a	b	a	a	b	a	a	a	8	2	0
6	a	b	b	a	a	a	b	b	a	b	5	5	0
7	b	a	a	a	b	a	c	b	b	a	4	4	2
8	b	a	b	c	a	b	a	b	b	a	4	5	1
9	a	a	a	b	a	a	b	a	a	a	8	2	0
10	a	a	a	b	a	a	b	b	c	a	6	3	1
11	a	a	a	b	b	a	b	b	b	a	5	5	0
12	a	b	a	b	b	b	b	b	a	a	4	6	0
13	a	a	a	b	a	a	b	b	a	a	7	3	0
14	a	b	b	a	a	a	c	a	a	a	7	2	1
15	a	a	b	b	a	a	b	c	a	a	6	3	1

16	a	a	a	b	a	a	b	c	a	a	7	2	1
17	b	a	a	b	a	a	b	c	c	a	5	3	2
18	a	a	a	b	a	a	b	c	b	a	6	3	1
19	a	a	a	b	a	a	b	c	b	a	6	3	1
20	a	a	b	c	a	a	b	c	b	a	5	3	2
21	a	c	b	c	a	b	b	c	c	b	2	4	4
22	b	b	a	c	b	a	a	b	c	b	3	5	2
23	a	a	a	b	b	a	c	a	a	c	6	2	2
24	a	b	b	b	a	a	b	a	a	a	6	4	0
25	a	a	a	b	a	b	b	c	a	a	6	3	1
26	a	b	b	a	b	a	b	b	a	a	5	5	0
27	a	b	a	b	a	a	b	a	b	a	6	4	0
28	a	a	a	a	a	a	c	c	a	a	8	0	2
29	b	a	a	b	c	b	c	c	c	a	3	3	4
30	a	a	a	b	c	b	a	b	b	a	5	4	1

Table .2

Data of Students Questionnaire Score

No	Student's Name	Questionnaire Score			Score of Questionnaire			Total
		A	B	C	a x 3	b x 2	c x 1	
1	Lailatul. Q	6	2	2	18	4	2	24
2	Intan Nor Ainy	3	3	4	9	6	4	19

3	Nur Laili Abelia	9	1	0	27	2	0	29
4	Irmalatus Syarifah	5	4	1	15	8	1	24
5	Yeni Ariska.W	8	2	0	24	4	0	28
6	Sholehati Novial.F	5	5	0	15	10	0	25
7	Nabiatus Salamah	4	4	2	12	8	2	22
8	Khairiyah	4	5	1	12	10	1	23
9	Cahaya Rembulan	8	2	0	24	4	0	28
10	Nukma Wilviah	6	3	1	18	6	1	25
11	Sofiatus Solehah	5	5	0	15	10	0	25
12	Siti Rohmawati	4	6	0	12	12	0	24
13	Wiwin Wulandari	7	3	0	21	6	0	27
14	Wilda Abd.Rozaq	7	2	1	21	4	1	26
15	Khalisah Nur.H	6	3	1	18	6	1	25
16	Raisya Faradila	7	2	1	21	4	1	26
17	Soviatur.R	5	3	2	15	6	2	23
18	Mi'ah	6	3	1	18	6	1	25
19	Nur Halimah	6	3	1	18	6	1	25
20	Fitriatul Kamilah	5	3	2	15	6	2	23
21	Fitriatul Aini	2	4	4	6	8	4	18
22	Siti Halimatus.S	3	5	2	9	10	2	21
23	Nur Lailatul.J	6	2	2	18	4	2	24
24	Adiska	6	4	0	18	8	0	24
25	Siti Alifiatus.S	6	3	1	18	6	1	25
26	Sitti Aisyah	5	5	0	15	10	0	25
27	Selfia Mardiana.P	6	4	0	18	8	0	26
28	Lailatul Riskiyeh	8	0	2	24	0	2	26

29	Siti Wahyuni	3	3	4	9	6	4	19
30	Maulidatul Amina	5	4	1	15	8	1	24
Total					728			

b) The Result of Documentation

Documentation is used to collect data related to variable Y (students' speaking skill). The documentation is the score of speaking skill at BBEC Mamabaul Ulum Bata-bata, Palengaan Pamekasan 24th of period, 2021. The researcher get the document from the teacher.

The data from the documentation will be analyzed by using statistical method. The documentation is the students speaking score.

c) The Result of SprakingTest

Table.3

Data of Students Speaking Score

No	Student's Name	Score of Students
1	Lailatul Qomariyah	80
2	Intan Nor Ainy	75
3	Nur Laili Abelia	70
4	Irmalatus Syarifah	70
5	Yeni Ariska.W	90
6	Sholehati Novial.F	75
7	Nabiatu Salamah	90
8	Khairiyah	80
9	Cahaya Rembulan	80

10	Nukma Wilviah	75
11	Sofiatus Solehah	90
12	Siti Rohmawati	65
13	Wiwin Wulandari	70
14	Wilda Abd.Rozaq	70
15	Khalisah Nur.H	80
16	Raisya Faradila	80
17	Soviatur.R	75
18	Mi'ah	90
19	Nur Halimah	70
20	Fitriatul Kamilah	70
21	Fitriatul Aini	85
22	Siti Halimatus.S	70
23	Nur Lailatul.J	80
24	Adiska	80
25	Siti Alifiatus.S	65
26	Sitti Aisyah	85
27	Selfia Mardiana.P	75
28	Lailatul Riskiyeh	90
29	Siti Wahyuni	70
30	Maulidatul Amina	80
Total		2.325

2. The Statistical Analysis

a) Validity of Instrument

After obtaining the score of questionnaire score, the researcher will give prove about the validity of questionnaire that has been conducted. The researcher states that the test have content validity since the material that tested has been explained by the teacher. See in Appendix.

b) Reliability of Questionnaire

A good test must be valid and reliable. Test reliability define the degree in which a test consistently measures whatever it will measures. In this study the researcher used formula cronbach alpha. In this test the reliability testing is applied individually, namely reliability testing of questionnaire. They are explaining in the following above:

Reliability of Questionnaire

Table.4

Analyze Item of Questionnaire

No	Student Alternative Answer										Total score	Quadrate of Total Score
	1	2	3	4	5	6	7	8	9	10		
1	3	3	3	1	3	3	2	2	1	3	28	784
2	3	3	2	1	1	1	3	1	2	2	19	361
3	3	2	3	3	3	3	3	3	3	3	29	841
4	3	3	2	2	3	3	1	2	3	2	24	576
5	3	3	3	2	3	3	2	3	3	3	28	784
6	3	2	2	3	3	3	2	2	3	2	25	625
7	2	3	3	3	2	3	1	2	2	3	24	576
8	2	3	2	1	3	2	3	2	2	3	23	529

9	3	3	3	2	3	3	3	3	3	3	27	729	
10	3	3	3	2	3	3	2	2	3	3	24	576	
11	3	T	3	3	2	2	3	2	2	1	3	25	625
12	3	a	2	3	2	2	2	2	2	2	3	24	576
13	3	b	3	3	2	3	3	2	2	3	3	27	729
14	3	l	2	2	3	3	3	1	3	3	3	26	676
15	3	e	3	2	2	3	3	2	1	3	3	25	625
16	3	.	3	3	2	3	3	2	1	3	3	25	625
17	2	5	3	3	2	3	3	2	1	1	3	23	529
18	3	E	3	3	2	3	3	2	1	2	3	25	625
19	3	a	3	3	2	3	3	2	1	2	3	25	625
20	3	c	3	2	1	3	3	2	1	2	3	23	529
21	3	b	1	2	1	3	2	2	1	1	2	18	324
22	2	h	2	3	1	2	3	3	2	1	2	21	441
23	3	r	3	3	2	2	3	1	3	3	1	24	576
24	3	l	2	2	2	3	3	2	3	3	3	26	676
25	3	t	3	3	2	3	2	2	1	3	3	25	625
26	3	e	2	2	3	2	3	2	2	3	3	25	625
27	3	m	2	3	2	3	3	2	3	2	3	26	767
28	3		3	3	3	3	3	1	1	3	3	26	767
29	2	Q	3	3	2	2	2	1	1	1	3	23	529
30	3	u	3	3	2	2	2	3	2	2	3	24	576
	85	a	80	80	60	78	85	61	56	69	86	737	18.451

drate

No	X_{1^2}	X_{2^2}	X_{3^2}	X_{4^2}	X_{5^2}	X_{6^2}	X_{7^2}	X_{8^2}	X_{9^2}	X_{10^2}
1	9	9	9	1	9	9	4	4	1	9

2	9	9	4	1	1	1	9	1	4	4
3	9	4	9	9	9	9	9	9	9	9
4	9	9	4	4	9	9	1	4	9	4
5	9	9	9	4	9	9	4	9	9	9
6	9	4	4	9	9	9	4	4	9	4
7	4	9	9	9	4	9	1	4	4	9
8	4	9	4	1	9	4	9	4	4	9
9	9	9	9	4	9	9	4	9	9	9
10	9	9	9	4	9	9	4	4	1	3
11	9	9	9	4	4	9	4	4	4	3
12	9	4	9	4	4	4	4	4	9	9
13	9	9	9	4	9	9	4	4	9	9
14	9	4	4	9	9	9	1	9	9	9
15	9	9	4	4	9	9	4	1	9	9
16	9	9	9	4	9	9	4	1	9	9
17	4	9	9	4	9	9	4	1	1	9
18	9	9	9	4	9	9	4	1	4	9
19	9	9	9	4	9	9	4	1	4	9
20	9	9	4	1	9	9	4	1	4	9
21	9	1	4	1	9	4	4	1	1	4
22	4	4	9	1	4	9	9	4	1	4
23	9	9	9	4	4	9	1	9	9	1
24	9	4	4	4	9	9	4	9	9	9
25	9	9	9	4	9	4	4	1	9	9
26	9	4	4	9	4	9	4	4	9	9
27	9	4	9	4	9	9	4	9	4	9

28	9	9	9	9	9	9	1	1	9	9
29	4	9	9	4	1	4	1	1	1	9
30	9	9	9	4	1	4	9	4	4	9
	245	249	220	132	216	232	127	122	177	225

Before the researcher knows the sum of variances of the item scores, the researcher must find the variance of each question. From the table above, the researcher could find the variance of each question.

$$a^2(1) = \frac{245 - \frac{85^2}{30}}{30} = \frac{245 - 240,83}{30}$$

$$= 0,13$$

$$a^2(2) = \frac{249 - \frac{80^2}{30}}{30} = \frac{249 - 213,33}{30}$$

$$= 1,18$$

$$a^2(3) = \frac{220 - \frac{80^2}{30}}{30} = \frac{220 - 213,333}{30}$$

$$= 0,22$$

$$a^2(4) = \frac{132 - \frac{60^2}{30}}{30} = \frac{132 - 120}{30}$$

$$= 0,4$$

$$a^2(5) = \frac{216 - \frac{78^2}{30}}{30} = \frac{216 - 262,8}{30}$$

$$= 0,44$$

$$a^2(6) = \frac{232 - \frac{85^2}{30}}{30} = \frac{232 - 240,83}{30}$$

$$= -0,29$$

$$a^2(7) = \frac{127 - \frac{61^2}{30}}{30} = \frac{127 - 124,03}{30}$$

$$a^2(8) = \frac{122 - \frac{56^2}{30}}{30} = \frac{122 - 104,53}{30}$$

$$= 17,47$$

$$a^2(9) = \frac{177 - \frac{69^2}{30}}{30} = \frac{177 - 158,7}{30}$$

$$= 18,3$$

$$a^2(10) = \frac{225 - \frac{86^2}{30}}{30} = \frac{225 - 246,53}{30}$$

$$= 0,71$$

The sum of the variance of item score :

$$\sum_{ab} 2 = 0,13 + 1,18 + 0,22 + 0,4 + 0,44 + - 0,29 + 2,97 + 17,47 + 18,3 + - 0,71 = 40,11$$

Total variance of all question :

$$a_{t^2} = \frac{18.451 - \frac{737^2}{30}}{30} = \frac{18.451 - 18.105}{30} = 11,53$$

We know that :

$$K : 10$$

$$\sum_{ab} 2 : 40,11$$

$$a_{2t} : 11,53$$

From the result above, we can put numbers to the formula :

$$\begin{aligned} r_{11} &= \left(\frac{k}{(k-1)} \right) \left(1 - \frac{\sum_{ab} 2}{a_{2t}} \right) \\ &= \left(\frac{10}{(10-1)} \right) \left(1 - \frac{40,11}{11,53} \right) \\ &= \frac{30}{29} \times \left(1 - \frac{40,11}{11,53} \right) \end{aligned}$$

$$\begin{aligned}
 &= \frac{30}{29} \times (1 - 3,478) \\
 &= 1,03 \times (- 2,478) \\
 &= 2,552
 \end{aligned}$$

Then to know whether or not the instrument is reliable, the researcher consult the value of r_{11} to r table. Where the number of sample (N) is 30, and the degree of freedom (df) is N-2, so df : 30-2 = 28. The critical of r table on level of significance 5% is 0,374. After that the reseracher compare r value with t table. If the value of r_{11} is higher than r table the instrument of questionnaire is reliable.

Table 6

The value of relibility of Questionnaire comparison

Df	Significance level	r table	r value
28	5%	0,374	2,552

Based on the data above, we know r value is 2,552 and r table in significance level of 5 % is 0,374 ($r_{11} > r \text{ table}$). So that the researcher conclude that the item of questionnaire is reliable.

c) Analyze The Data of Questionnaire and Documentation

Before testing the hypothesis, data of questionnaire and documentation will be analyzed by using product moment formula. In analyzed the data the researcher used some following steps as follow:

- 1) Determine mean X (x) and mean Y (y)¹

$$X = \frac{\sum x}{N}$$

$$Y = \frac{\sum y}{N}$$

X (mean X)

Y (mean Y)

N: The Number of Respondent

$\sum x$: Sum of questionnaire answer

$\sum y$: Sum of the result students score in speaking

Mean X and Y will be calculated as follow:

$$N = 30$$

$$\sum x = 728$$

$$\sum y = 2.325$$

$$X = \frac{\sum x}{N} = \frac{728}{30} = 24,3$$

$$Y = \frac{\sum y}{N} = \frac{2.325}{30} = 77,5$$

- 2) Determine x and y using formula as follow:

$$x = X - x$$

$$y = Y - y$$

The data can be seen in table.7

Table .7

The score of X and Y

¹Hartono, *Statistic Untuk Penelitian*. Jogyakarta Pustaka Pelajar Obset 2004 P.,30

No	X	Y	$x=(X-x)$	X	$y=(Y-y)$	Y
1	24	80	24 – 24,3	-0,3	80 – 77,5	2,5
2	13	75	13 – 24,3	-11,3	75 – 77,5	-2,5
3	29	70	29 – 24,3	4,7	70 – 77,5	-7,9
4	24	70	24 – 24,3	-0,3	70 – 77,5	-7,9
5	28	90	28 – 24,3	3,7	90 – 77,5	12,1
6	25	75	25 – 24,3	0,7	75 – 77,5	-2,5
7	22	90	22 – 24,3	-2,3	90 – 77,5	12,1
8	23	80	23 – 24,3	-1,3	80 – 77,5	2,5
9	28	80	28 – 24,3	3,7	80 – 77,5	2,5
10	25	75	25 – 24,3	0,7	75 – 77,5	-2,5
11	25	90	25 – 24,3	0,7	90 – 77,5	12,1
12	24	65	24 – 24,3	-0,3	65 – 77,5	12,9
13	27	70	27 – 24,3	2,7	70 – 77,5	-7,9
14	26	70	26 – 24,3	1,7	70 – 77,5	-7,9
15	25	80	25 – 24,3	0,7	80 – 77,5	2,5
16	26	80	26 – 24,3	1,7	80 – 77,5	2,5
17	23	75	23 – 24,3	-1,3	75 – 77,5	-2,5
18	25	90	25 – 24,3	0,7	90 – 77,5	12,1
19	25	70	25 – 24,3	0,7	70 – 77,5	-7,9
20	24	70	24 – 24,3	-0,3	70 – 77,5	-7,9
21	18	85	18 – 24,3	-6,3	85 – 77,5	7,1
22	21	70	21 – 24,3	-3,3	70 – 77,5	-7,9
23	24	80	24 – 24,3	-0,3	80 – 77,5	2,5
24	24	80	24 – 24,3	-0,3	80 – 77,5	2,5
25	25	65	25 – 24,3	0,7	65 – 77,5	12,9

26	25	85	25 – 24,3	0,7	85 – 77,5	7,1
27	26	75	26 – 24,3	1,7	75 – 77,5	-2,5
28	26	90	26 – 24,3	1,7	90 – 77,5	12,1
29	19	70	19 – 24,3	-5,3	70 – 77,5	-7,9
30	24	80	24 – 24,3	-0,3	80 – 77,5	2,5

3) Determine $x^2, y^2,$ and xy .

The data can be seen in table .8

Table .8

Coefficient correlation between questionnaire and documentation score

No	X	Y	X	Y	x ²	y ²	Xy
1	24	80	-0,3	2,5	0,09	6,25	0,75
2	13	75	-11,3	-2,5	127,69	6,25	28,25
3	29	70	4,7	-7,9	22,09	62,41	37,13
4	24	70	-0,3	-7,9	0,09	62,41	2,37
5	28	90	3,7	12,1	13,69	146,41	44,77
6	25	75	0,7	-2,5	0,49	6,25	1,75
7	22	90	-2,3	12,1	5,29	146,41	27,83
8	23	80	-1,3	2,5	1,69	6,25	3,25
9	28	80	3,7	2,5	13,69	6,25	9,25
10	25	75	0,7	-2,5	0,49	6,25	1,75
11	25	90	0,7	12,1	0,49	146,41	8,47
12	24	65	-0,3	-12,9	0,09	166,41	3,87
13	27	70	2,7	-7,9	7,29	62,41	21,33
14	26	70	1,7	-7,9	2,89	62,41	13,43

15	25	80	0,7	2,5	0,49	6,25	1,75
16	26	80	1,7	2,5	2,89	6,25	4,25
17	23	75	-1,3	-2,5	1,69	6,25	3,25
18	25	90	0,7	12,1	0,49	146,41	8,47
19	25	70	0,7	-7,9	0,49	62,4	5,53
20	24	70	-0,3	-7,9	0,09	62,4	2,37
21	18	85	-6,3	7,1	39,69	50,41	44,73
22	21	70	-3,3	-7,9	10,89	62,4	26,07
23	24	80	-0,3	2,5	0,09	6,25	0,75
24	24	80	-0,3	2,5	0,09	6,25	0,75
25	25	65	0,7	12,9	0,49	166,41	9,03
26	25	85	0,7	7,1	0,49	50,41	4,97
27	26	75	1,7	-2,5	2,89	6,25	4,25
28	26	90	1,7	12,1	2,89	146,41	20,57
29	19	70	-5,3	-7,9	28,09	62,4	41,87
30	24	80	-0,3	2,5	0,09	6,25	0,75
Sum					287,9	1.746,18	383,56

Based on the table above, we know that:

$$\sum x^2 = 287,9$$

$$\sum y^2 = 1.746,18$$

$$\sum xy = 383,56$$

4) Counting product moment

From the data above, that researcher puts the number into the formula of product moment, the analyzing of data as follow:

$$\begin{aligned}
 r_{xy} &= \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}} \\
 &= \frac{383,56}{\sqrt{(287,9)(1.746,18)}} \\
 &= \frac{383.56}{\sqrt{502.725}} \\
 &= \frac{383.56}{\sqrt{709.031}} \\
 &= 0,549
 \end{aligned}$$

From the data analysis above we know that the value of r_{xy} is 0,549

3. Hypothesis Testing

The hypothesis testing is the most important step in conducting a research. To find out whether this study accept or reject the hypothesis.

Based on the data analysis above, we know that the value of r_{xy} is 0,549 after that, we consult the value of r_{xy} to r table, the value of $N=30$ in significance 5% is 0,361. The value of r_{xy} is the higher that r table. It means that there is has correlation of using night competition program to students speaking skill, so the hypothesis stated that there is correlation between students who join the night competition routine and students speaking skills at BBEC Mambaul Ulum Bata-bata Palengaan, Pamekasan.

To know how significant the effectiveness of use night competition program on the students speaking skill at the Mambaul Ulum Bata-bata, Palengaan Pamekasan. It must consult to interpretation coefficient correlation table. The table is as follow:

Table .9

Interpretation of r table

No	The hight of “r” value	Interpretation
1	Between 0 till with 0.20	There is lowest correlation between variable X and variable Y, So it considers as nothing
2	Between 0.20 till with 0.40	There is low correlation between variable X and variable Y
3	Between 0.40 till with 0.70	There is sufficient or enough correlation between variable X and variable Y
4	Between 0.70 till with 0.90	There is hight or strong correlation between variable X and variable Y
5	Between 0.90 till with 1.00	There is correlation between variable X and variable Y with very strong correlation

Based on the table interpretation of r_{xy} above, we know that the value of r_{xy} is 0,549 between 0,40 till with 0,70 in the level of enough or sufficient. The correlation is significance. So there is significant correlation of using night competition program on students speaking skill at the BBEC.

B. Discussion of the Findings

This part presents a discussion of this result. The result shows there has correlation of using night competition routine on students speaking skill, this is

proven with comparerxy/ "r" value of this research with "r". The rxy value is 0,549. This value is higher than r table 0,361 in level significance 5% with N 30.

More student of BBEC join night competition routine, more student Of BBEC have good in speaking. This is proven after comparing the value of "rxy" $0,549 > 0,361$ "r" table and in r table interpretation shows the value 0,549 was sufficient, there is correlation between student join night competition routine and speaking skill.

After the researcher examine the student of BBEC using questionnaire and test, the researcher know if there is differences between students who always join night competition routine have good speaking skill than students who are not join night competition routine at BBEC Mambaul Ulum Bata-bata.

Based on analysis data by using "r" table formula that reasercher done. The researcher can know that night competition routine has correlation to students speaking skill at BBEC Mambaul Ulum Bata-bata, Palengaan Pamekasan. So the hypothesis of this reaserch is accepted, it mean this night competition routine has correlation to use in speaking and night competition routine show significant correlation on student speaking skill with sufficient correlation.