CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter presents and discusses the statistical result based on the instruments that are used in conducting the research. The data is presented which are presentation of data, hypothesis testing and measurement of validity and reliability of the test.

A. Presentation of Data

As state on the chapter I, there is two research problems of this research. They are: Do the more student write diary, the better their writing skill on paragraph at Aphrodite English Club (AEC) of Annuqayah Islamic Boarding School? And how is significance of writing diary habit and students' writing skill on paragraph at Aphrodite English Club (AEC) Annuqayah Islamic Boarding School.

In this case, the researcher needs to present the data to know the correlation of both variables include dependent variable and independent variable. The researcher uses questionnaire, test, and documentation as the instrument of collecting data. Whereas questionnaire is the instrument of collecting data for independent variable (variable X) it is diary writing habit and test is the instrument of collecting data for dependent variable (variable Y) it is writing skill and documentation is the instrument to be documented while the researcher takes the data of both variables.

1. Data Presentation of Writing Diary Habit Questionnaire

To know the result of the data on independent variable (variable X) the researcher uses questionnaire as the instrument. Dealing with the explanation on chapter III the researcher uses close questionnaire form which the researcher provides the answer therefor the respondents can choose the answer which appropriate for themselves, and the numerical data of this questionnaire will shows by using Likert-Scale form "strongly disagree (1)" to "strongly agree (5)". It contains strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). Besides, the data must be valid and reliable. To know both results, the researcher uses construct validity and coefficient alpha.

a. The Result of The Data

In this research, the researcher got the numerical data by giving the questionnaire to all members of Aphrodite English Club Annuqayah Islamic Boarding School. It only needs one meeting to spread the questionnaire to all members. It was held on 15, January 2021 at 08.00 – 08.30 am. The meeting has four activities, they were:

1) Entering the class and checking the student' attendance list.

2) Gave the questionnaire to all members of Aphrodite English Club.

3) The researcher gave the clear instruction to the members

4) Collecting the answer of the questionnaire

      The score of the students' questionnaire can be seen on the table as follow:

Table 4.1

Score of the Questionnaire

Students Name	Number of Item															SUM
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
MI	4	4	5	4	5	4	4	4	5	3	3	4	2	3	3	57
WS	3	4	4	5	3	4	4	3	5	5	4	4	4	5	5	62
AZ	5	5	4	4	5	4	4	5	4	4	5	5	5	5	5	69
IR	3	4	5	4	4	4	5	3	5	4	4	5	3	4	4	61
QVA	4	4	4	3	4	4	5	5	4	3	5	3	4	4	5	61
K	4	5	4	4	4	5	5	4	4	5	4	5	2	5	5	65
NK	5	4	4	5	3	4	5	4	3	5	5	3	4	3	3	60
NA	3	3	5	3	4	5	4	3	3	3	3	4	2	3	4	52
SR	4	4	5	5	4	4	3	4	5	3	4	4	5	3	5	62
NSR	3	4	5	3	4	5	4	4	5	3	3	3	3	4	3	56
WS	5	4	5	4	4	4	4	5	5	5	4	4	3	5	5	66
SD	5	5	5	4	4	5	5	5	4	5	4	4	3	4	5	67
SRFS	4	5	5	4	5	5	4	5	5	5	4	3	5	4	4	67

DKN	5	4	4	3	4	5	4	4	4	5	5	5	3	4	4	63
IDA	5	5	4	4	3	4	5	5	5	3	4	4	3	5	5	64
KH	5	4	5	5	3	4	3	5	3	3	5	3	3	4	4	59
EM	3	4	3	5	3	4	3	4	5	5	5	5	3	4	4	60
LJ	5	3	5	4	5	5	4	4	3	5	3	3	5	5	5	64
AMA	5	4	4	4	5	3	4	5	5	4	4	4	2	3	3	59
MT	4	5	4	5	4	4	5	5	5	5	4	3	4	5	5	67
NBP	5	3	4	5	4	4	5	5	5	4	4	5	3	4	4	64
L	5	5	5	5	4	5	5	4	4	4	5	5	5	5	5	71
ST	5	5	5	5	4	4	4	5	5	4	5	4	5	5	5	70
QNF	5	4	5	3	4	4	4	5	4	5	5	4	2	4	5	63
Total of score																**1.509**

Based on the data above the total score of the questionnaire is 1509, in this questionnaire, the highest score of all items is 75. But, the scores of all members are lower than 75. The higher score is 71 and the lower score is 52 of total members 24 members.

b. Validity of Questionnaire

The validity use to measure how far the instrument especially questionnaire instrument is valid or not. Dealing with this research, the researcher uses construct validity as the choice of validity types. The researcher chooses construct validity because it generally use for measuring psychological

construct such as, intelligence, motivation, anxiety or critical thinking.[1] It obviously compatible with the kind of researcher's questionnaire, it contains statements which related to motivation, critical thinking, and also anxiety. Before testing the validity of questionnaire, the researcher will present the table coefficient value of correlation "r" product moment as follow:

Table 4.2

Table of Coefficient Value of Correlation "R" Product Moment[2]

	The distribution value r_{table}
Significance	5%
N	24
r_{table}	0.388

To testing the validity of questionnaire, the researcher uses SPSS 20 that is

Table 4.3

Testing of validity questionnaire

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[1]. Donald Ary., et al. *Introduction to Resarch in Education,* (New York: Holt, Reinhart and Winston. 2010), P. 206.

[2] Anas Sudjiono, *Pengantar Statistik Pendsidikan* (Jakarta: Rajawali Pers, 2014).P. 402.

Correlations

		X01	X02	X03	X04	X05	X06	X07	X08	X09	X10	X11	X12	X13	X14	X15	SUM
X01	Pearson Correlation	1	.189	.090	.117	.162	-.129	.158	.674**	-.277	.164	.394	.000	.161	.187	.110	.486*
	Sig. (2-tailed)		.377	.675	.588	.451	.548	.462	.000	.190	.445	.057	1.0000	.452	.383	.609	.016
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X02	Pearson Correlation	.189	1	-.056	.188	.000	.065	.269	.383	.268	.165	.363	.085	.282	.448*	.454*	.649**
	Sig. (2-tailed)	.377		.795	.379	1.0000	.763	.204	.064	.205	.441	.082	.694	.182	.028	.026	.001
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X03	Pearson Correlation	.090	-.056	1	-.194	.335	.335	-.109	-.052	-.144	-.255	-.358	-.283	.100	-.097	.046	-.016
	Sig. (2-tailed)	.675	.795		.365	.109	.109	.612	.810	.503	.230	.086	.179	.641	.653	.832	.942
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24

X04	Pearson Correlation	.117	.188	-.194	1	-.346	-.329	-.085	.040	.185	.153	.251	.073	.423*	.175	.130	.315
	Sig. (2-tailed)	.588	.379	.365		.097	.117	.695	.852	.386	.474	.237	.734	.039	.413	.545	.134
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X05	Pearson Correlation	.162	.000	.335	-.346	1	.120	.000	.185	.086	.000	-.366	.000	.120	-.087	-.082	.196
	Sig. (2-tailed)	.451	1.000	.109	.097		.577	1.000	.386	.691	1.000	.079	1.000	.578	.687	.704	.359
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X06	Pearson Correlation	-.129	.065	.335	-.329	.120	1	.146	-.292	-.372	.167	-.269	.000	.128	.190	.192	.113
	Sig. (2-tailed)	.548	.763	.109	.117	.577		.495	.166	.073	.436	.203	1.000	.550	.373	.369	.598
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X07	Pearson Correlation	.158	.269	-.109	-.085	.000	.146	1	.068	-.021	.148	-.022	.082	-.044	.254	.100	.348
	Sig. (2-tailed)	.462	.204	.612	.695	1.000	.495		.753	.923	.489	.918	.702	.839	.232	.643	.095
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24

X08	Pearson Correlation	.674**	.383	-.052	.040	.185	-.292	.068	1	.129	.035	.350	-.235	.104	.201	.104	.432*
	Sig. (2-tailed)	.000	.064	.810	.852	.386	.166	.753		.548	.870	.094	.269	.629	.347	.628	.035
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X09	Pearson Correlation	-.277	.268	-.144	.185	.086	-.372	-.021	.129	1	-.033	-.147	.217	-.006	.111	-.044	.219
	Sig. (2-tailed)	.190	.205	.503	.386	.691	.073	.923	.548		.880	.493	.308	.976	.605	.839	.304
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X10	Pearson Correlation	.164	.165	-.255	.153	.000	.167	.148	.035	-.033	1	.220	.128	.098	.351	.176	.478*
	Sig. (2-tailed)	.445	.441	.230	.474	1.0000	.436	.489	.870	.880		.302	.550	.647	.093	.411	.018
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X11	Pearson Correlation	.394	.363	-.358	.251	-.366	-.269	-.022	.350	-.147	.220	1	.232	.257	.172	.190	.387
	Sig. (2-tailed)	.057	.082	.086	.237	.079	.203	.918	.094	.493	.302		.276	.224	.423	.374	.062
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24

X12	Pearson Correlation	.000	.085	-.283	.073	.000	.000	.082	-.235	.217	.128	.232	1	-.202	.146	.069	.260
	Sig. (2-tailed)	1.0000	.694	.179	.734	1.0000	1.0000	.702	.269	.308	.550	.276		.343	.495	.748	.219
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X13	Pearson Correlation	.161	.282	.100	.423*	.120	.128	-.044	.104	-.006	.098	.257	-.202	1	.371	.479*	.584**
	Sig. (2-tailed)	.452	.182	.641	.039	.578	.550	.839	.629	.976	.647	.224	.343		.074	.018	.003
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X14	Pearson Correlation	.187	.448*	-.097	.175	-.087	.190	.254	.201	.111	.351	.172	.146	.371	1	.696**	.691**
	Sig. (2-tailed)	.383	.028	.653	.413	.687	.373	.232	.347	.605	.093	.423	.495	.074		.000	.000
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
X15	Pearson Correlation	.110	.454*	.046	.130	-.082	.192	.100	.104	-.044	.176	.190	.069	.479*	.696**	1	.604**
	Sig. (2-tailed)	.609	.026	.832	.545	.704	.369	.643	.628	.839	.411	.374	.748	.018	.000		.002
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24

S U M	Pearson Correlation	.486*	.649**	-.016	.315	.196	.113	.348	.432*	.219	.478*	.387	.260	.584**	.691**	.604**	1
	Sig. (2-tailed)	.016	.001	.942	.134	.359	.598	.095	.035	.304	.018	.262	.219	.003	.000	.002	
	N	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The validity of the item is appointed by analyzing:

1) Compare the value of r_{hitung} and r_{table}. If the value of r_{hitung} is bigger than r_{table}, it means the item of the questionnaire is valid. If the value of r_{hitung} is lower than r_{table}, it means the item of questionnaire is not valid.

2) Analyzing the signification of the item. If the value of the signification is lower than 0,05, it means the item of the questionnaire is valid. If the value of the signification is bigger than 0,05, it means the item of the questionnaire is not valid.

The way to get the value of r_{table}, it can be seen on a book.[3] By determining the amount of N and the signification of the table is 5%. This research the value of N = 24, whereas the value of r_{table} is 0.388 specifically in 5% signification.

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[3] Anas Sudjiono, *Pengantar Statistik Pendsidikan* (Jakarta: Rajawali Pers, 2014), P. 402

By the explanation above, the researcher finds some items of questionnaire are invalid and some items of questionnaire are valid after analyzing the validity testing. There are 7 items of the questionnaire are valid and there are 8 items of questionnaire are invalid it is because of the value of pearson correlationis lower than r_{table}, and the signification of the items is bigger than 0,005.

c. Reliability of The Questionnaire

To know the reliability of questionnaire, the researcher uses internal consistency reliability and calculates the linguistic intelligence score using coefficient alpha, also called Cronbach alpha. To measure the questionnaire is reliable or not, we must know the level of significance and r_{table}, that is:

Table 4.4

Table of Coefficient Value of Correlation "R" Product Moment

	The distribution value r_{table}
Significance	5%
N	25
r_{table}	0.388

To measure the reliability of questionnaire, the researcher uses SPSS 20 to make the researcher easier and decimate misinterpretation, are as follows:

Table 4.5

Case Processing Summary

		N	%
Cases	Valid	24	96.0
	Excluded[a]	1	4.0
	Total	25	100.0

a. Listwise deletion based on all variables in the procedure.

Table 4.6

Reliability Statistics

Cronbach's Alpha	N of Items
.626	15

Table 4.7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X01	58.46	17.650	.359	.590

X02	58.58	17.123	.592	.560
X03	58.29	21.085	-.120	.653
X04	58.63	18.853	.204	.616
X05	58.79	20.259	.015	.640
X06	58.50	20.522	-.009	.639
X07	58.54	19.389	.157	.622
X08	58.42	18.341	.318	.599
X09	58.42	20.167	.003	.647
X10	58.63	17.984	.278	.604
X11	58.58	18.514	.281	.604
X12	58.79	19.824	.050	.640
X13	59.33	15.884	.419	.573
X14	58.63	16.418	.613	.548
X15	58.50	16.783	.507	.564

Based on the data above, the result of Alpha is higher than $r_{table}(0,388)$, so all items of questionnaire is reliable.

2. **Data Presentation of The Test**

The instrument of the test is to know the result of numerical data on dependent variable (variable Y). It also have been explained on chapter III that writing test indicates students' writing ability on paragraph. The written test gives to the students after they answer the questionnaire. They must write a paragraph that

hasbeen appointed by the researcher. They must write a paragraph about themselves in 45 minutes. The paragraph analyzed by the organization of paragraph including topic sentence, supporting sentence, and concluding sentence. And it also analyzed from these three aspects:

a. Format and content

b. Organization and coherent

c. Sentence construction and vocabulary

The scoring rubric is analyzed by Hyland.[4]Then the score is classified based on criteria of ability as follow:

Table 4.8

Table of Criteria of Ability (adopted from InayatulMaula's Research)

Score	Criteria of Ability
91 – 100	Excellent
81 – 90	Very good
71 – 80	Good
61 – 70	Average
51 – 60	Fair
41 – 50	Poor
Less than 40	Inadequate

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[4]Hyland, *Second Language Writing,* (New York: Cambridge University Press, 2003), P. 243.

So the answer from the respondents will be scored by rating scale of speaking and the data must be valid and reliable, to know the validity and reliability of the data the researcher uses content validity and coefficient alpha.

a. The Test of Writing Skill

In this research, the researcher gets the data by test the members of Aphrodite English Club (AEC) Annuqayah Islamic Boarding School. The researcher needs 1 meeting, and it was held on January, 15 2021 at 08.30 – 09.15. And the meeting has four activities they were:

1. Entering the class and checking the students' attendance list.

2. Giving the test sheet to all member of Aphrodite English Club

3. Giving clear instruction of the test

4. All members submitted the test answer to researcher.

The score of writing skill can be seen in the table as follow:

Table 4.9

Result of Writing Test

No	Name	Criteria of Writing Test			SUM
		Format and Content	Organization and Coherence	Sentence Construction and	

		(1)	(2)	Vocabulary (3)	
1	MI	25	20	15	60
2	WS	20	20	20	60
3	AZ	25	15	30	70
4	IR	20	15	20	55
5	QVA	25	20	15	60
6	K	25	15	20	60
7	NK	20	15	20	55
8	NA	25	20	20	65
9	SR	20	15	25	60
10	NSR	25	20	20	65
11	WS	25	15	25	65
12	SD	30	20	20	70
13	SRFS	20	20	20	60
14	DKN	20	15	25	60
15	IDA	20	20	20	60
16	KH	20	20	20	60
17	EM	25	20	25	70
18	LJ	20	15	20	55
19	AMA	20	10	20	50
20	MT	20	20	20	60
21	NBP	20	15	25	60

22	L	35	20	25	80
23	ST	20	15	20	55
24	QNF	20	20	25	65
Score of Writing test					**1.480**

Based on the data above, the summative score of writing test is 1480. In this test, the highest score of all items are 100 score, but the result of students' answer of the questionnaire is lower than 100. The highest score is 80 and the lowest score is 59 of total members are 24 members.

1) Validity of Writing Test

The validity use to measure how far the instrument especially test instrument is valid or not. Dealing with this research, the researcher uses content validity as the choice of validity types. The researcher chooses content validity because it generally use for measuring task, question, and also achievement tests [5]   It obviously compatible with the kind of researcher's test, it contains an imperative to write a paragraph about themselves in certainly time. It's distinct like a task. Before testing the validity of the test, the researcher will present the table coefficient value of correlation "r" product moment as follow:

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[5]Ary et al., *Introduction to Reaserch in Education*. Page.,.

Table 4.10

Table of Coefficient Value of Correlation "R" Product Moment[6]

	The distribution value r_{table}
Significance	5%
N	24
r_{table}	0.388

To test the validity of the test the researcher uses SPSS 20 as follow:

Table 4.11

Testing validity of writing test

Correlations

		Y01	Y02	Y03	SUM
Y01	Pearson Correlation	1	.331	.098	.818[**]
	Sig. (2-tailed)		.114	.650	.000
	N	24	24	24	24
Y02	Pearson Correlation	.331	1	-.267	.521[**]
	Sig. (2-tailed)	.114		.207	.009
	N	24	24	24	24

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[6] Anas Sudjiono, *Pengantar Statistik Pendsidikan* (Jakarta: Rajawali Pers, 2014), P., 402.

Y03	Pearson Correlation	.098	-.267	1	.478*
	Sig. (2-tailed)	.650	.207		.018
	N	24	24	24	24
SUM	Pearson Correlation	.818**	.521**	.478*	1
	Sig. (2-tailed)	.000	.009	.018	
	N	24	24	24	25

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

To know which item of test is valid or not, we must compare the r_{total} with the r_{table}. In this research the total of members of Aphrodite English Club id 24 members, and all members are the participant of this research. Therefore, the totals of participant are 24 members, and the researcher uses significance 5%, and the r_{table} is 0,388.

Based on the data above, all the item of test speaking achievement is reliable because the value of r_{total} is higher than r_{table}. The explanations are as follows:

1) Item 1 is valid because r_{total} is 0,818>r_{table}0,388

2) Item 2 is valid because r_{total} is 0,521>r_{table}0,388

3) Item 2 is valid because r_{total} is 0,478>r_{table}0,388

2) Reliability of Writing Skill

To know reliability of test, the researcher uses internal consistency reliability and calculates the test of students' writing skill score by using coefficient alpha, also called Cronbach alpha. To measure the test is reliable or not, we must know the level of significance and r_{table}, that is:

Table 4.12

The Table Coefficient Value of Correlation "R" Product Moment

	The distribution value r_{table}
Significance	5%
N	24
r_{table}	0,388

To measure the reliability of test of students' writing skill, the researcher uses SPSS 20 to make the researcher easier and decimate misinterpretation, are as follows:

Table 4.13

Case Processing Summary

		N	%
Cases	Valid	24	96.0
	Excluded[a]	1	4.0

Total	25	100.0

a. Listwise deletion based on all

variables in the procedure.

Table 4.14

Reliability Statistics

Cronbach's Alpha	N of Items
.177	3

Table 4.15

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Y01	38.96	15.172	.337	-.716[a]
Y02	44.17	29.710	.068	.177
Y03	40.21	31.476	-.073	.483

Based on the data above, the result of Alpha is higher than $r_{table}(0,388)$, so all items of writing test is reliable.

3. **Data Presentation of Documentation**

    The data were gotten from documentation, as follow:

    a. The members of Aphrodite English Club, consist of twenty four members name list.

    b. The picture of members of Aphrodite English Club, were doing the test.

    c. The structure of supervisors of Aphrodite English Club.

After the researcher counts the score of questionnaire and test, the researcher correlates those score through data analysis.

4. **Analyzing Data of Writing Diary Habit and Students' Writing Skill**

After testing the validity and reliability of both variables, writing diary habit and students' writing skill, the researcher must analyze the data that have gotten from the respondents, writing diary habit (variable X) and students' writing skill (variable Y). The result of both variables as follows:

a. Entry The Result of Variable X and Y

Table 4.16

The Result of Writing Diary Habit and Students' Writing Skill

Name	Variables	
	Writing Diary Habit (X)	Students' Writing Skill (Y)
MI	57	60
WS	62	60
AZ	69	70
IR	61	55

QVA	61	60
K	65	60
NK	60	55
NA	52	65
SR	62	60
NSR	56	65
WS	66	65
SD	67	70
SRFS	67	60
DKN	63	60
IDA	64	60
KH	59	60
EM	60	70
LJ	64	55
AMA	59	50
MT	67	60
NBP	64	60
L	71	70
ST	70	55
QNF	63	60
Total	**1509**	**1465**

After the researcher get the data between variable X (writing diary habit) and variable Y(Students' writing skill),to get

statistical numerical data from questionnaire score and test score the researcher correlates both variable by using formula of product moment. To make the researcher easy to correlate both of them officially the researcher analyses it by using table as follow:

Based on the table above, the computation of product moment is administrated as follow:

Table 4.17

Table of Preparation to Find Out the Coefficient of Product

Subject	Variables		XY	X^2	Y^2
	Writing Diary Habit (X)	Students' Writing Skill (Y)			
MI	57	60	3.420	3.249	3.600
WS	62	60	3.720	3.844	3.600
AZ	69	70	4.830	4.761	4.900
IR	61	55	3.355	3.721	3.025
QVA	61	60	3.660	3.721	3.600
K	65	60	3.900	4.225	3.600
NK	60	55	3.300	3.600	3.025
NA	52	65	3.380	2.704	4.225
SR	62	60	3.720	3.844	3.600
NSR	56	65	3.640	3.136	4.225

WS	66	65	4.290	4.356	4.225
SD	67	70	4.690	4.489	4.900
SRFS	67	60	4.020	4.489	3.600
DKN	63	60	3.780	3.969	3.600
IDA	64	60	3.840	4.096	3.600
KH	59	60	3.540	3.481	3.600
EM	60	70	4.200	3.600	4.900
LJ	64	55	3.520	4.096	3.025
AMA	59	50	2950	3.481	2.500
MT	67	60	4.020	4.489	3.600
NBP	64	60	3.840	4,096	3.600
L	71	70	5.680	5.041	4.900
ST	70	55	3.850	4.900	3.025
QNF	63	60	3.780	3.969	3.600
24 = N	**1.509=$\sum X$**	**1.465=$\sum Y$**	**92.925=$\sum XY$**	**95.357=$\sum X^2$**	**90.075=$\sum Y^2$**

b. Analyzing the data by statistical analysis

Based on the table 4.17, the researcher gets some points about two variables. Writing diary habit and Students' writing skill as follow:

N $\quad$ = 24

$\sum X$ $\quad$ = 1.509

$\sum Y$ $\quad$ = 1.465

$\sum XY$ = 92.925

$$\sum X^2 = 95.357$$

$$\sum Y^2 = 90.075$$

After that, the researcher will count the correlate both of them by using correlation - pearson product moment:[7]

$$r_{xy} = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{(n(\sum x^2) - (\sum x)^2)(n(\sum y^2) - (\sum y)^2)}}$$

$$r_{xy} = \frac{24(\sum 92925) - (\sum 1509)(\sum 1465)}{\sqrt{(24(\sum 95357) - (\sum 1509)^2)(24(\sum 90075) - (\sum 1465)^2)}}$$

$$r_{xy} = \frac{(2.230.200) - (2.210.685)}{\sqrt{(2.288.568 - 2.277.081)(2.161.800 - 2.146.225)}}$$

$$r_{xy} = \frac{19.515}{\sqrt{(11.487)(15.575)}}$$

$$r_{xy} = \frac{19.515}{\sqrt{178.910.025}}$$

$$r_{xy} = \frac{19.515}{13.375.72}$$

$$r_{xy} = 1.459$$

Based on the calculation of Product Moment the researcher finds r_{xy} = 1.459. Therefore to know the hypothesis of the

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[7] Anas Sudjiono, *Pengantar Statistik Pendsidikan* (Jakarta: Rajawali Pers, 2014), P.206

researcher will be rejected or accepted, the researcher needs to perform hypothesis testing.

B. Hypothesis Testing

According to Creswell, hypotheses are statements in quantitative research in which the investigator makes a prediction or a conjecture about the outcomes of a relationship among attributes or characteristics.[8] There are two kinds of hypotheses, null hypotheses and alternative hypotheses. Hypotheses are important things in quantitative research because hypothesis is as the final result of the research. There are two kinds of hypothesis, null hypothesis (Ho) and alternative hypothesis (Ha).the researcher determines alternative hypothesis (Ha) as the hypothesis of this research.

Based on the analyzing data by statistical analysis, the researcher uses Correlation Pearson Product Moment. The result of r_{xy}= 1,459. After the researcher knows about the value then, the last step is comparing r_{xy} with r_{table}. If r_{xy} is highest or equal than r_{table} it means Ha is accepted and Ho is rejected, but if r_{xy} is lowest than r_{table} it means Ho is accepted and Ha is rejected.

Before determine the hypothesis of this research is accepted or not, the researcher must determine the value of df (*degrees of freedom*) to determine the value of r_{table} and the formula are as follows:

df = N – nr

df :*Degrees of Freedom*

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[8]Creswell, *Educational Research Planning, Conducting And Evaluating Quantitative And Qualitative Research*. Page., 111.

N :*Number of Cases* (N = 24)

nr =*Sum of Variables*

df = N – nr

df = 24 – 2

df = 22

The value of df is 22, whereas value of r_{table} can search by using the value of df. The value of rtable of 22specifically at the significance 5% is 0.404.

Table 4.18

Table of Coefficient Value of Correlation "r" Product Moment

	The distribution value r_{table}
Significance	5%
Df	22
r_{table}	0.404
r_{xy}	1.459

From the result of the table above, the value of $r_{xy}$is 1.459 and the value of $r_{table}$of coefficient value correlation product moment in 5% significant error is 0.404. The result shows that r_{xy} is higher than $r_{table.}$ Therefore, the hypothesis of this research (alternative hypothesis) is accepted. Whereas null hypothesis (Ho) f this research is rejected. It means that there is correlation between writing diary habit and students' writing skill at paragraph. The final result of this research is

the more students' write diary the better their writing skill at paragraph at Aphrodite English Club (AEC) Annuqayah Islamic Boarding School.

The researcher not only compares r_{xy} and r_{table} to know how far the relationship between two variables but it will be interpretation in table below:

Table 4.19

Table of Interpretation of 'r' value product – moment

No	'r' value product – moment	Interpretation
1	0,00 – 0,200	The correlation between variable X and Y is extremely low
2	0,200 – 0,400	The correlation between variable X and Y is low
3	0,400 – 0,700	The correlation between variable X and Y is enough
4	0,700 – 0,900	The correlation between variable X and Y high
5	0,900 – 1,00	The correlation between variable X and Y is strongly high

Based on the table above, the result of this research is 1,459 and from the table above the result of this research include to the third interpretation that is 0,900 – 1,00. Therefor it can conclude that there is correlation between variable X and variable Y and the correlation of variable X and Y is strongly high correlation.

So, the researcher concludes that there is correlation between writing diary habit and students' writing skill on paragraph at Aphrodite English Club (AEC) Annuqayah Islamic Boarding School.

C. Discussion and Finding

In this research, there is two research problems that researcher wants to research, as follows:

1. Do The More students Write Diary, The Better Their Writing Skill on Paragraph at Aphrodite English Club (AEC) Annuqayah Islamic Boarding School?

Based on the data above, the result of this research that analyzing by statistical analysis Pearson Product Moment shows that there is correlation between writing diary habit and students' writing skill at paragraph. It means that the students write diary the better their writing skill at paragraph. It is proved by comparing the result of r_{xy} with $r_{table.}$ The result of r_{xy} is 1,459 and the value of r_{table}0.404. Therefore, the result of r_{xy} is highest than r_{table} (1.459> 0.404). Based on the hypotheses testing the null hypotheses is rejected and the alternative hypothesis is accepted.

The result of this research is there is correlation between writing diary habit and students' writing skill at paragraph. In order the more students write diary the better their writing skill on paragraph at Aphrodite English Club (AEC) Annuqayah Islamic Boarding School. Logically student who always practice their

writing it will get a better feedback on writing skill. One of easy way to keep practice their writing is by having habit in writing something such as journal diary. Literally that habit has strong correlation with writing skill.

2. **How is the significance of writing diary habit and students' writing skill on paragraph at Aphrodite English Club (AEC) Annuqayah Islamic Boarding School?**

In this research, there is correlation between writing diary habit and students' writing skill on paragraph at Aphrodite English Club (AEC) Annuqayah Islamic Boarding School. It is evidenced by the result of r_{xy} is 1,459 and the value of r_{table} 0.404. Therefor the result of r_{xy} is highest than r_{table} (1,459> 0.404). When see the table interpretation of 'r' value product – moment, the value of r_{xy} = 0.628 include to the third interpretation that is 0.900 – 1.00 and the interpretation is the correlation between variables X and Y is strong high. Therefore, the researcher concludes that the students who have habit in writing diary have enough significant level to their writing skill in learning English.