

CHAPTER IV

FINDING AND DISCUSSION

In this chapter, the researcher presents the finding of the research. This chapter consists of the description of data, hypothesis testing and discussion. The finding appropriate with data score of students' Test of English Proficiency and Research statistics.

A. Description of The Data

As mentioned in the previous chapter, the study used quantitative research. The description of data was described by providing numbers and tables. The subject or sample of this research is the students of English department on sixth semester which consist 50 students that has been choose from 190 student by systematic random sampling. The researcher get the score TOEP from Head of Language Center of IAIN Tulungagung and the score of Research Statistic get from the researcher's advisor. The research analyze both of data by using Pearson Product Moment to know the correlation from both of data. Additionally, in this chapter, the data will be presented and described in the detail as follow:

1. Data of the scores of TOEP and Research Statistics

The data of students' TOEP score that gets from Head of Language Center of IAIN Tulungagung and the data of students' statistics score that researcher's advisor. The both of scores as follow:

Table 4.1 the scores of TOEP and Research Statistic

NO	NAME	TOEP	STATISTICS
1	LRC	447	23
2	ADM	430	60
3	DSU	423	60
4	DA	447	20
5	HLM	423	36
6	ASM	427	46
7	YEW	410	23
8	FAJ	463	0,06
9	NDT	440	53
10	SV	410	30
11	NR	447	73
12	NF	410	30
13	AR	413	30
14	MFFA	413	30
15	FP	467	33
16	MJ	450	46
17	FYL	413	33
18	F	453	46
19	NLN	457	36
20	SM	423	13
21	MRRM	453	40
22	MH	467	46
23	RFS	443	20
24	MTP	477	53
25	DZM	457	66
26	VKK	437	30
27	ASN	413	23
28	JFR	403	23
29	DAC	443	16
30	AUF	433	20
31	LAN	440	43
32	DA	443	30
33	DPA	427	40
34	RIB	433	40
35	KM	440	50
36	AP	433	0
37	S	460	56
38	VS	447	73
39	DA	400	63
40	ADA	450	50
41	AW	447	63

42	APIS	467	33
43	SDA	410	33
44	DA	433	0
45	AS	413	16
46	PADR	443	13
47	PSN	453	13
48	NR	440	26
49	DAAL	400	60
50	FA	433	23

2. Correlational Testing

After get all of data, the researcher use Pearson Product Moment to count the data, because variables of the data is interval and interval. The result of correlation of was in the table below:

Table 4.2 the Correlation – Calculation by Pearson Product Moment

Correlations		
	TOEP	Rs
TOEP Pearson Correlation	1	.114
Sig. (2-tailed)		.432
N	50	50
Rs Pearson Correlation	.114	1
Sig. (2-tailed)	.432	
N	50	50

Based on the table the researcher interpreted that there are 50 respondents for correlation between students' English Proficiency and statistics competence. Get the result of pearson correlation is 0.114 from SPSS 16.0.

The table above showed the correlation coefficient equaled $r = 0.114$, which indicated that there was positive correlation between two variables. This research was positive correlation because the variables had same moderate score, if the subjects had low score in TOEP, they also had low score in Research Statistics. On the contrary, if they had high score in TOEP they also had high score in Research Statistics. From the r number (0.114) the researcher could use it to know the strength of correlation between two variables. The number of 0.114 indicates that the correlation between two variables is enough. Whereas, for the number sig (2 –tailed) = 0.432 will be used to know which hypothesis will be accepted or rejected.

3. Normality Testing

Table 4.3 Normality Testing using One Sample Kolmogorov-Smirnov

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		50
Normal	Mean	.0000000
Parameters ^a	Std. Deviation	18.46487951
Most	Absolute	.072
Extreme	Positive	.062
Differences	Negative	-.072
Kolmogorov-Smirnov Z		.510
Asymp. Sig. (2-tailed)		.957

a. Test distribution is Normal.

Based on the table 4.3, normality test was done using SPSS (Statistical Product and Service Solutions) 16.0 for Windows towards the

two scores (TOEP and Research Statistics) obtained from the students. The value of Asymp. Sig. (2 tailed) was 0.957 which higher than 0.05 ($0.957 > 0.05$). As a result, the Null hypothesis (H_0) was accepted while the Alternative Hypothesis (H_a) was rejected. Accordingly, all data from the scores was in a normal distribution.

B. Hypothesis Testing

This research has been completed in collecting data and has obtained the correlation results. To answer the research problem, the researcher must measure whether the hypothesis is rejected or not. To calculate the hypothesis, researchers used the Pearson Product Moment formula. Researchers have two hypotheses in this study, those are:

1. H_0 (Null Hypothesis)

There is no significant correlation between students' English Proficiency and their Statistics Competence

2. H_a (Alternative Hypothesis)

Alternative Hypothesis (H_a): there is correlation between students 'English Proficiency and their Statistics Competence.

To know the answer, the researcher used SPSS 16.0 hypothesis testing based on the N. Sig (number of significance). As the result of correlation on table 4.2, the researcher get $r = 0.114$, N. Sig = 0.432. The analysis of which hypothesis was accepted refer to the significance value

($\alpha = 5\%$). Alternative hypothesis (H_a) would be accepted when the rcount was higher than 0.05; $\text{rcount} > 0.05$. Meanwhile, when the rcount was lower than 0.05; $\text{rcount} < 0.05$, it could be marked that null hypothesis (H_0) was the accepted one.

Looked at the output of correlation value from SPSS 16.0, it marked by Pearson Product Moment was 0.114. This was obviously higher than the level of significance (5% or 0.05). Hence, it automatically indicated that alternative hypothesis (H_a) **“there is low positive correlation between students’ english proficiency and their statistics competence”**, was accepted while H_0 was automatically rejected. It can be stated on the basis of data taken from the samples students’ English Proficiency and their Statistics Competence in sixth semester students of English Department at IAIN Tulungagung.

C. DISCUSSION

In the last part of this chapter, the researcher would fully review the result of this research dealing with the finding up to the hypothesis testing. As expected in the first chapter, this study aimed to figure out whether there was correlation between English students' proficiency and their statistics competence in English class. Therefore, after finishing in selecting the populations by systematic random sampling of 190 English students become 50 students, the researcher continue to collect the data by documentation that is getting data from the parties concerned. So that researcher can directly process the value to become complete data.

This discussion derived from the analysis of the findings. The analysis had been accomplished in order to answer the research problem. From the analysis, the researcher would like to discuss the result of the test. Further, after having completely collected data, the researcher continued to analyze the normality of the data as prerequisite to verify the correlation between two variables in this study. Firstly, began with the discussion in chapter 4 about normality testing, the researcher found the Asymp. Sig. (2-tailed) was 0.957 which means it was higher than 0.05. In this case, the data collected in this study was in a normal distribution. Finally, the researcher continued to figure out the correlation result between students' English proficiency and their statistics competence which was 0.114. Related to Creswell (2012: 347), that had been discussed in the previous chapter, when correlations fall into the range 0.35 – 0.65, they are the typical values used to identify variable membership in the statistical procedure of factor analysis and many correlation coefficients for bivariate relationship fall into this area.

As attached in the previous chapter, this study used correlational research design which the researcher is interested in the extent to which two variables (or more) co-vary. In addition, alternative hypothesis (H_a) was accepted because it had been found that r_{count} (0.114) was higher than significance level ($\alpha=0.05$), while for null hypothesis (H_0) was automatically rejected. Thus, the correlation itself belonged to the low positive correlation or directional correlation as the Pearson Product Moment value was in the positive number and was not in the negative one.

Based on the description above, if students have a high or low score on the test of English proficiency (TOEP) it will influence their academic competence, especially in statistics. But indeed some students do not experience it. Because, this is related to English proficiency so all skill are important to be mastery. Not only skills but the students of English department must mastery in other non-English subjects. Although in this study no strong correlation was found between the two but it did not rule out the possibility if both of them still had a correlation even though it was very low. However English proficiency can have an impact on non-English subjects because the use of the handbook still uses English. Researcher hope that many similar studies will be developed further because technological very rapid developments.