

CHAPTER IV

RESEARCH FINDINGS

In this chapter, the researcher presents research findings and discussion. It presents finding dealing with students' learning style, students' anxiety, English achievement, and statistical analysis

A. Research Finding

There are three kinds of research findings in this study: (1) descriptive statistics, (2) statistical assumption and (3) hypotheses testing

1. Descriptive Statistic

a. Students' Learning Style

The results analysis of descriptive statistics of students' Learning Style was described in Table 4.1

Table 4.1
Descriptive Statistic of Learning Style

	N	Minimum	Maximum	Mean	Std. Deviation
X ₁	47	100	152	121.64	9.244
Valid N (listwise)	47				

In descriptive statistics of students' Learning Style, it was found that the total number of participants were 47 students. The minimum score was 100 and the maximum score was 152. The mean of the students' learning style for the participants was 121.64 and the standard deviation was 9.244.

It was revealed that from the questionnaire, the three levels of students' Learning Style were all perceived by the students with different numbers. But the researcher can divide it into some types. The details were described in Table 4.2

Table 4.2
Distribution of Learning Style

Category	Students	Percentage
Visual	14	29.8 %
Audiotory	13	27.7 %
Kinesthetic	20	42.6 %
Total	47	100 %

Based on the results analysis of the questionnaire, it shows that there were visual learning style with 14 (29.8 %) students. Audiotory learning style with 13 (27.7 %) students. The last is kinesthetic learning style with 20 (42.6) students. The most dominant students' learning style is kinesthetic learning style.

b. Students' Anxiety

The total students in sample are 67 students. 47 students participated in this study, and the others were absent when conducting this study. The 33 items of Students' Anxiety questionnaire were used to investigate the students' anxiety. In answering each question in the questionnaire, the students choose Strongly Agree to Strongly Disagree with each statement. After the students choose, the result would be to analyze SPSS 22. For each of the five scales, subtract the smaller total from the larger one and wrote the difference (5-165) and the Likert-scale with the larger total.

The results analysis of descriptive statistics of students' anxiety was described in Table 4.3

Table 4.3
Descriptive Statistics of Anxiety

	N	Minimum	Maximum	Mean	Std. Deviation
X ₂	47	92	145	122.26	11.892
Valid N (listwise)	47				

In descriptive statistics of anxiety, it was found that the total number of participants were 47 students. The minimum score was 92 and the maximum score was 145. The mean of the students' anxiety for the participants was 122.26 and the standard deviation was 11.892.

It was revealed that from the questionnaire, the three levels of students' anxiety were all perceived by the students with different numbers. The details were described in Table 4.4

Table 4.4
Distribution of Anxiety

Interval	Category	Students	Percentage
≥ 144	High anxiety	3	6.3 %
108 – 144	Moderate anxiety	38	80.8 %
≤ 108	Low Anxiety	6	12.7 %
Total		47	100 %

Based on the results analysis of the questionnaire, it shows that there were 6 (12.7 %) who got the score ≤ 108 in low of anxiety and 38 (80.8 %) students got the score between 108 – 144 in moderate level of anxiety. The last is 3 students with (6.3 %) in high anxiety.

c. Students' English Achievement

The result analysis of descriptive statistics of students' Achievement was described in Table 4.5.

Table 4.5
Descriptive Statistic of Students' Achievement

	N	Minimum	Maximum	Mean	Std. Deviation
Y	47	70	85	76.62	4.062
Valid N (listwise)	47				

In descriptive statistics of students' achievement, it was found that the total number of participants were 47 students. The minimum score was 70 and the maximum score was 85. The mean of the students' achievement for the participants was 76.62 and the standard deviation was 4.062.

In distribution of data frequency, the result of the students' english achievement was described in Table 4.6

Table 4.6
Descriptive Statistic of English Achievement

Interval	Category	Students	Percentage
≥ 81	Very Good	9	19.1 %
71 – 80	Good	33	70.2 %
≤ 70	Poor	5	10.6 %
Total		47	100 %

Based on the result analysis of students' english achievement, it shows that there were 5 (10.6 %) students who got the score ≤ 70 in poor category, 33 (70.2 %) students got the score between 71-80 in

good category and 9 (19.1 %) students got the score ≥ 81 in very good category

2. Statistical Assumption

Normality test and linearity test were conducted prior to data analysis through SPSS 22th version for windows.

1. Normality Test

The data were interpreted normal if $p > 0.05$. The data are not normal if $p < 0.05$. Kolmogorov-smirnov was used to see the normality. The results of normality test shown in table 4.7 indicated that the all data from each variable were normal

Table 4.7
One-Sample Kolmogorov-Smirnov Test

		X1	X2	Y
N		47	47	47
Normal Parameters ^{a,b}	Mean	121.64	122.26	76.62
	Std. Deviation	9.244	11.892	4.062
Most Extreme Differences	Absolute	.103	.102	.092
	Positive	.103	.084	.092
	Negative	-.095	-.102	-.080
Test Statistic		.103	.102	.092
Asymp. Sig. (2-tailed)		.200 ^{c,d}	.200 ^{c,d}	.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

From the table 4.7 of normality test, it was found that the significant of normality test from students' learning style was .200, students' anxiety was .200 and students' English achievement was .200. From the scores, it could be stated that the obtained data were categorized normal for students' learning style, students' anxiety and students English achievement because those more than 0.05.

Based on the result of normality test, the data are interpreted normal if $p > 0.05$. The data are not normal if $p < 0.05$. It can be seen in the table 4.7 that the significant of normality test from students' learning style was .200, students' anxiety was .200 and students' English achievement was .200. From the scores, it could be stated that the obtained data were categorized normal for students' learning style, students' anxiety and students' English achievement because those more than 0.05. Hypothesis testing stated that if p-value is higher than 0.05 ($p > 0.05$), the level of significance is 5%, H_0 is accepted and H_a is rejected.

2. Linearity Test

a. Result of Linearity Test students' learning style and students' achievement

For linearity test, deviation of linearity was obtained. The linearity found whenever the p-output was higher than 0.05 and the F-value was lower than F-table. The result analysis of linearity test between students' learning style, students' anxiety and students' achievement were figured out in Table 4.8

Table 4.8

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Y * X1	Between Groups	(Combined)	193.722	24	8.072	1.422	.205
		Linearity	.000	1	.000	.000	.994
		Deviation from Linearity	193.721	23	8.423	1.483	.180
Within Groups			124.917	22	5.678		
Total			318.638	46			

Based on measuring linearity test of Learning Style questionnaire and Students English achievement scores, they were found that the two variables were linear since it was higher than .05. The results showed that the F- value (1.48) was lower than F- table (2.05) and the significant level was 0.180. The distribution showed that the significance level was higher than 0.05. It means that the variables were linear between students' learning style and students' English achievement.

b. Result of Linearity Test students' anxiety and students' achievement

Table 4.9

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Y * X2	Between Groups	(Combined)	318.440	29	10.981	.424	.980
		Linearity	.682	1	.682	.026	.873
		Deviation from Linearity	317.758	28	11.348	.438	.975
Within Groups			440.667	17	25.922		
Total			759.106	46			

Based on measuring linearity test of Anxiety questionnaire and Students' English achievement scores, they were found that the two variables were linear since it was higher than .05. The results showed that the F- value (.438) was lower than F- table (2.17) and the significant level was 0.975. The distribution showed that the significance level was higher than 0.05. It means that the variables were linear between students' anxiety and students' English achievement.

Based on the result of the linearity test The results showed that the F- value (1.48) was lower than F- table (2.05) and the significant level was 0.180. The distribution showed that the significance level was higher than 0.05. It means that the variables were linear between students' learning style and students' English achievement. And for students' anxiety and students' English achievement, the results showed that the F- value (.438) was lower than F- table (2.17) and the significant level was 0.975. The distribution showed that the significance level was higher than 0.05. It means that the variables were linear between students' anxiety and students' English achievement.

The result of the statistical assumption test implied that the data were normal for each variable and linear between variables. The researcher used parametric statistics to measure the hypothesis, in term of correlation and regression were used in this research. It could be stated in normality test that the obtained data were categorized normal for students' learning style, students' anxiety and students English achievement. In line

with result of linearity that the variables were linear between students' learning style and students' English achievement.

3. Hypotheses Testing

This section answered the research problems. To answer the research problem, the researcher has to measure whether the hypothesis is accepted or rejected. The researcher used coefficient correlation product moment to test the hypotheses.

Based on Pearson Product Moment Correlation Coefficient, correlation coefficient or the r -obtained (.018) was lower than r -table (.288). then the level of probability (p) significance (sig.2-tailed) was .906. It means that p (.906) was higher than .05. The result indicated that no correlation has found between students' learning style and students' English achievement. This is the same with students' anxiety and students' English achievement, correlation coefficient or the r -obtained (.030) was lower than r -table (.288). then the level of probability (p) significance (sig.2-tailed) was .842. It means that p (.842) was higher than .05. The result indicated that there was no correlation with students' anxiety and students' English achievement. It can be stated that the null hypothesis (H_0) is accepted and alternative hypothesis (H_a) is rejected. The result of Pearson Product Moment Correlation Coefficient was described in Table 4.10

Table 4.10
Correlation between Students' Learning Style, Students' Anxiety and
Students' English Achievement

		X1	X2	Y
X1	Pearson Correlation	1	.006	.018
	Sig. (2-tailed)		.966	.906
	N	47	47	47
X2	Pearson Correlation	.006	1	.030
	Sig. (2-tailed)	.966		.842
	N	47	47	47
Y	Pearson Correlation	.018	.030	1
	Sig. (2-tailed)	.906	.842	
	N	47	47	47

Table 4.11
Multiple Regression

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.913	2	.457	.026	.974 ^b
Residual	758.193	44	17.232		
Total	759.106	46			

a. Dependent Variable: Achievement

b. Predictors: (Constant), Anxiety, Learning Style

The hypotheses of this study are formulated into the following statements.

1. **H₀** : There is no significant correlation between Students' Learning Style and students' English achievement in SMK PGRI KRAS
H_a : There is significant correlation between Students' Learning Style and Students' English achievement in SMK PGRI KRAS
2. **H₀** : There is no significant correlation between Students' anxiety and Students' English achievement at SMK PGRI KRAS.

H_a : There is a significant correlation between Students' anxiety and Students' English achievement at SMK PGRI KRAS.

3. H_0 : There is no significant correlation between students' learning style and students' anxiety toward students' English achievement at SMK PGRI KRAS

H_a : There is significant correlation between students' learning style and students' anxiety toward students' English achievement at SMK PGRI KRAS

In testing hypotheses, there are some criteria. Those are in the following (Cresswell, 2012), (Fraenkel. Wallen and Hyun, 2012), (Cohen, Manion, and Marrison, 2007).

1. If p-value is higher than 0.05 ($p > 0.05$), the level of significance is 5%, H_0 is accepted and H_a is rejected.
 2. If p-value is less than 0.05 ($p < 0.05$), the level of significance is 5%, H_0 is rejected and H_a is accepted.
1. For the first research question about correlation students' learning style and English achievement, the researcher wants to try to test a hypothesis. P (.906) value of students' learning style was higher than .05, with the level of significance is 5%, it means that null hypotheses H_0 accepted and alternative hypotheses H_a rejected. It can be concluded that there is no significant correlation between Students' Learning Style and students' English achievement in SMK PGRI KRAS.
 2. The next research question is about correlation students' anxiety and students' achievement. P (.842) value of students' anxiety was higher

than .05, with the level of significance is 5%, it means that null hypotheses H_0 accepted and alternative hypotheses H_a rejected. It can be concluded that there is no significant correlation between Students' anxiety and Students' English achievement at SMK PGRI KRAS

3. The last research question is about students learning style and students' anxiety toward students' English achievement. For students' learning style and students' anxiety $p(.974)$ value, the value is higher than (0.05). It means that null hypotheses H_0 accepted and alternative hypotheses H_a rejected. It can be concluded that there is no significant correlation between Students' learning style and students' anxiety toward students' English achievement.