

CHAPTER IV

FINDINGS AND DISCUSSION

A. Findings

This research was conducted on English Department in Higher Institution of Education in Banjarmasin. This chapter present the result of research in the form of a data description of correlation between musical and language syntactic competence.

The result of this research and the discussion are data analysis result gathered during the research process. It is collected based on the result of test which has done outside classroom to undergraduate students of Higher Institution of Education in Banjarmasin.

The researcher gathered the sample by looking under some specification that was made, for it is important to make sure which researcher get the right sample. Based on the result of the test, the researcher found these data below:

4.1 Musical Syntactic Competence Test Result

Score	Frequency	Percentage	Category
80-100	3	15%	Excellent
70-<80	13	65%	Good
60-<70	4	20%	Fair
50-<60	0	0%	Low
Total	20	100%	

The table above shows Musical Syntactic Competence Test Result. There are 15% who are in the excellent level. 65% are in the good level. Then, 20% in the fair level and 0% in low level. The higher score is 83 and the lowest score is 60.

To know the 'mean' of Musical Syntactic Competence Test Result, the researcher using statistical formula below:

$$\begin{aligned}
 Mx &= \frac{\sum x}{N} \\
 &= \frac{1451}{20} \\
 &= 72.55
 \end{aligned}$$

Based on the result of applied mean formula, the total score is 1451 of 20 students, and the mean score is 72.55 shows that the Musical Syntactic Competence is in good category.

4.2 Language Syntactic Competence Test Result

Score	Frequency	Percentage	Category
80-100	12	60%	Excellent
70-<80	6	30%	Good
60-<70	2	10%	Fair
50-<60	0	0%	Low
Total	20	100%	

The table above shows Language Syntactic Competence Test Result. There are 60% who are in the excellent level. 30% are in the good level. 10% are in the fair level and 0% in low level. The highest score is 90 and the lowest score is 65.

To know the mean of Language Syntactic Competence Test Result, the researcher using statistical formula below:

$$\begin{aligned}
 \text{My} &= \frac{\sum y}{N} \\
 &= \frac{1596}{20} \\
 &= 79.8
 \end{aligned}$$

Based on the result of mean formula, the total score is 1596 of 20 students, and the mean score is 79.8. It shows that the students' achievement in Academic writing is in good category.

4.3 Data Analysis using Pearson Product Moment

X	Y	x	y	xy	x ²	y ²
83	85	10,45	5,20	54,34	109,20	27,04
82	90	9,45	10,20	96,39	89,30	104,04
82	88	9,45	8,20	77,49	89,30	67,24
78	78	5,45	-1,80	-9,81	29,70	3,24
78	88	5,45	8,20	44,69	29,70	67,24
78	88	5,45	8,20	44,69	29,70	67,24
75	82	2,45	2,20	5,39	6,00	4,84
75	85	2,45	5,20	12,74	6,00	27,04
75	78	2,45	-1,80	-4,41	6,00	3,24
75	82	2,45	2,20	5,39	6,00	4,84
72	85	-0,55	5,20	-2,86	0,30	27,04
72	82	-0,55	2,20	-1,21	0,30	4,84
71	78	-1,55	-1,80	2,79	2,40	3,24
70	82	-2,55	2,20	-5,61	6,50	4,84
70	65	-2,55	-14,80	37,74	6,50	219,04
70	70	-2,55	-9,80	24,99	6,50	96,04
65	75	-7,55	-4,80	36,24	57,00	23,04
60	80	-12,55	0,20	-2,51	157,50	0,04
60	65	-12,55	-14,80	185,74	157,50	219,04

60	70	-12,55	-9,80	122,99	157,50	96,04
X =	Y =			$\Sigma xy =$	$\Sigma x^2 =$	$\Sigma y^2 =$
1451	1596			725,20	952,95	1069,20

After that, the writer analyses the data by using Pearson Product moment correlation form. The formula is:

$$\begin{aligned}
 r_{xy} &= \frac{\Sigma xy}{\sqrt{(\Sigma x^2)(\Sigma y^2)}} \\
 &= \frac{725.20}{\sqrt{(952.95)(1069.20)}} \\
 &= \frac{752.20}{\sqrt{1018894.14}} \\
 &= \frac{752.20}{1009.40} \\
 &= 0.745
 \end{aligned}$$

Then, the writer found out that the “r’ value for N= 20 is 0.444 for 5% significance degree and 0.561 for 1% significance degree. It is clear that

$$r_{xy} > r_t$$

$$r_{xy} = 0,745$$

$$r_t = 0.444 \text{ \& } 0.561$$

$$r_{xy} > r_t$$

This manual operation also supports by a program calculation, which is called SPSS. By using this program, the result also shows a significance correlation between those two variables. The calculation as follows:

		VAR00001	VAR00002
VAR00001	Pearson Correlation	1	,718**
	Sig. (2-tailed)		,000
	N	20	20
VAR00002	Pearson Correlation	,718**	1
	Sig. (2-tailed)	,000	
	N	20	20

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

It means that null hypothesis (H0) is denied and alternative hypothesis (Ha) is accepted. It means that there is a significant correlation between musical syntactic competence and English language syntactic competence.

Furthermore, the writer consulted to the table standard classification of correlation degree from Savuela and Nicolae (Savuela, Dorel & Constantinecu, Nicolae. (2010) Statistical Correlation Study,

Mathematics and Computer Science Series Journal, University of Craiova, Volume 37(3), 35-51). They determine the price of correlation as follows :

1. If $0 \leq r < 0.20$ there is no significant relation between variables.
2. If $0.20 \leq r \leq 0.50$ the relationship between variables is low.
3. If $0.50 \leq r \leq 0.75$ the relationship between variables is average.
4. If $0.75 \leq r \leq 0.95$ the relationship between variables is strong.
5. If $0.95 \leq r \leq 1$ there is a functional relation between two variables.

From the explanation above, it is seen that $r_{xy} 0,745$ means that the correlation between variable X and Y is in average level. It means that there is an average correlation between variable X and variable Y in this research.

B. Discussion

Average correlation that becomes the result should clear the hesitation of a question about is there any correlation or not. The correlation between them is undeniably exist; It would be more interesting if other studies will find more data through better and competent sample, it could be in a special school that teach music as well as the language.

This result comes up because samples who take the test, most of them, have not got any formal education in music and do not take enough

times to expand their musical ability. In Finland, like it is stated in one of the previous studies above, Finnish children have got a musical education from their early age. And it gives a valuable result which makes Finland becoming the country who the people can speak about three or more languages beside their first language.

Some samples also stated that they actually only learn musical syntax by themselves. This factor can be the reason why the result does not come to a big number of correlations.