

**CHAPTER IV**  
**RESEARCH FINDINGS AND DISCUSSION**

This chapter is devoted to the results of the study. It mainly focus on the students' perceptual learning style preferences of English Education Program at STAIN Tulungagung, the TOEFL test score, and the correlation between their students' perceptual learning style preferences and English Proficiency. Findings will be presented in the same sequence with the research questions.

**A. The Description of the Data**

**1. Students' Perceptual Learning Style Preferences**

The data of Students' perceptual learning style preferences was the result of the shared questionnaire. The result of the above-mentioned questionnaire is as follows:

**Table 4.1**

**The result of Perceptual Learning Style Preferences Questionnaire**

Subject	Score			Major LS
	Visual	Auditory	Kinesthetic	
<b>1</b>	40	36	36	Visual
<b>2</b>	32	38	30	Auditory
<b>3</b>	42	34	38	Visual
<b>4</b>	38	28	32	Visual
<b>5</b>	34	40	36	Auditory
<b>6</b>	36	46	36	Auditory
<b>7</b>	30	34	38	Kinesthetic
<b>8</b>	38	36	36	Visual
<b>9</b>	36	36	40	Kinesthetic
<b>10</b>	38	32	32	Visual
<b>11</b>	40	40	36	Visual

*Continued*

*Continuation*

<b>12</b>	36	42	38	Auditory
<b>13</b>	42	34	36	Visual
<b>14</b>	40	36	36	Visual
<b>15</b>	36	34	40	Kinesthetic
<b>16</b>	36	38	44	Kinesthetic
<b>17</b>	36	34	42	Kinesthetic
<b>18</b>	36	22	38	Kinesthetic
<b>19</b>	38	42	36	Auditory
<b>20</b>	34	42	32	Auditory
<b>21</b>	40	34	44	Kinesthetic
<b>22</b>	42	38	28	Visual
<b>23</b>	42	36	36	Visual
<b>24</b>	34	38	28	Visual
<b>25</b>	38	32	34	Visual
<b>26</b>	28	38	24	Visual
<b>27</b>	42	30	30	Visual
<b>28</b>	34	32	38	Kinesthetic
<b>29</b>	34	38	34	Auditory
<b>30</b>	34	40	34	Auditory
<b>31</b>	34	32	38	Kinesthetic
<b>32</b>	38	42	34	Auditory
<b>33</b>	34	30	38	Kinesthetic
<b>34</b>	26	38	36	Auditory
<b>35</b>	32	38	28	Auditory
<b>36</b>	38	28	26	Visual
<b>37</b>	38	32	42	Kinesthetic
<b>38</b>	30	38	34	Auditory
<b>39</b>	36	30	40	Kinesthetic
<b>40</b>	40	32	34	Visual
<b>41</b>	36	40	36	Auditory
<b>42</b>	38	30	34	Visual
<b>43</b>	36	40	32	Auditory
<b>44</b>	36	38	34	Auditory
<b>45</b>	40	28	30	Visual
<b>46</b>	36	38	34	Auditory
<b>47</b>	46	28	36	Visual
<b>48</b>	34	44	32	Auditory
<b>49</b>	38	40	30	Auditory
<b>50</b>	46	36	38	Visual
<b>51</b>	36	34	40	Kinesthetic
<b>52</b>	36	34	38	Kinesthetic
<b>53</b>	34	36	38	Kinesthetic

*Continued*

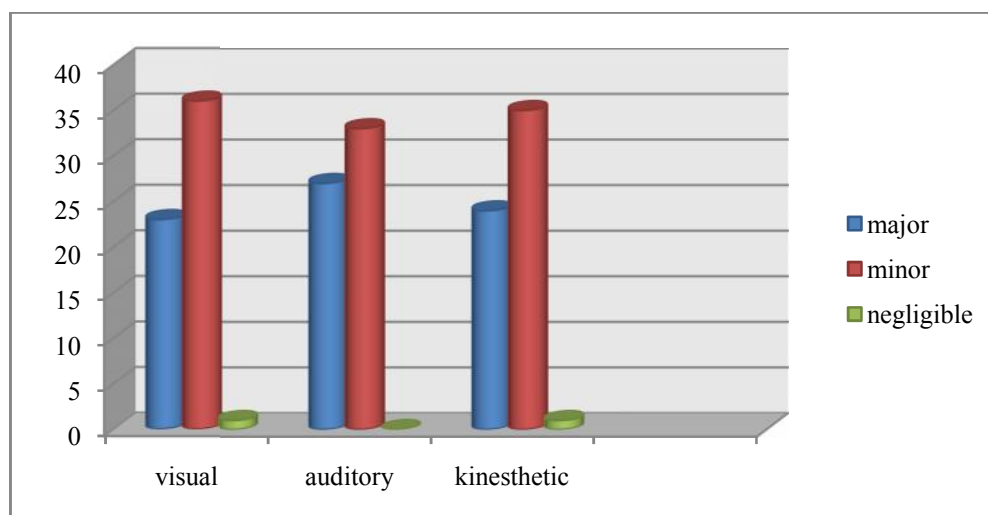
*Continuation*

<b>54</b>	30	36	40	Kinesthetic
<b>55</b>	38	30	46	Kinesthetic
<b>56</b>	36	30	40	Kinesthetic
<b>57</b>	36	34	38	Kinesthetic
<b>58</b>	44	26	32	Visual
<b>59</b>	48	26	38	Visual
<b>60</b>	40	34	44	Kinesthetic

The table 4.1 related to Students' perceptual learning style preferences above is figured in figure 4.1 below to make it easy to understand.

**Figure 4.1**

**Distribution of Overall Students' Perceptual Learning Style Preference**



Based on the table 4.1 and figure 4.1., it show that 23 students have major learning style in visual, 36 students have minor learning style in visual, and one student is negligible. 27 students have major learning style in auditory, 33 students have minor learning style in auditory, and no one is negligible. 24 students have major learning style in kinesthetic, 35 students have minor learning style in kinesthetic, and one student is negligible.

Then the data was computed using descriptive statistic using SPSS 19.0 for windows. The result is as follows:

**Table 4.2**

**The Mean of Students' Perceptual Learning Style Preferences**

**Statistics**

Perceptual Learning Style Preferences

N	Valid	60
	Missing	0

**Style**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Auditory	18	30.0	30.0	30.0
Kinesthetic	20	33.3	33.3	63.3
Visual	22	36.7	36.7	100.0
Total	60	100.0	100.0	

Based on the table 4.2 it shows that from the 60 students responding the questionnaire about perceptual learning style, there are 18 students (30.0 %) are Auditory learner, 20 students (33.3 %) are kinesthetic learner, and the last 22 students (36.7%) are Visual learner.

**Table 4.3**

**The Descriptive Analysis of the Perceptual Learning Style Preferences**

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Auditory	24	22.00	46.00	36.2500	4.91006
Visual	60	26.00	48.00	36.9333	4.18985
Kinesthetic	60	24.00	46.00	35.7000	4.53723
Valid N (listwise)	24				

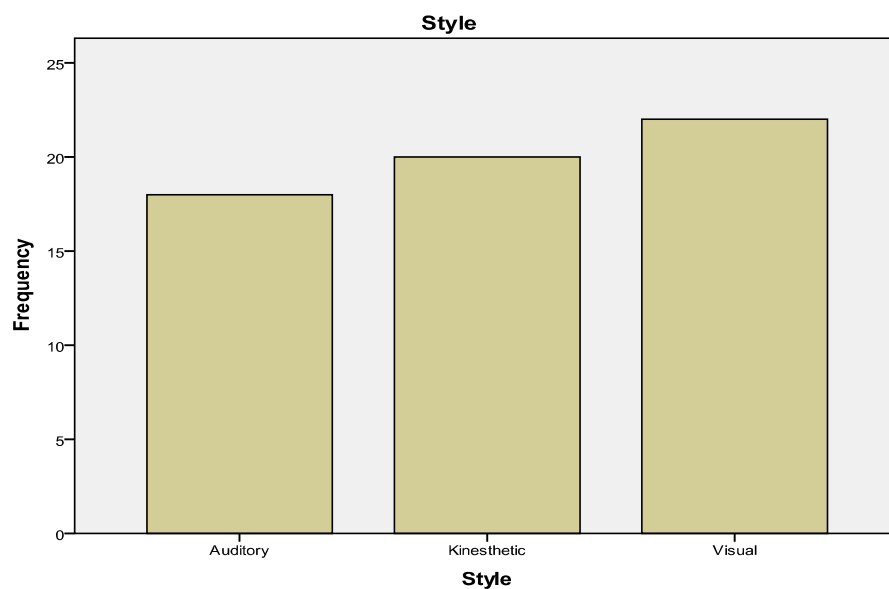
Based on the table above, it shows that from the 60 students responding questionnaire about perceptual learning style preferences,

Auditory is obtained the minimum score 22; the maximum score is 46; the mean score is 36.2500; and the standard deviation is 4.91006. Visual is obtained the minimum score 26; the maximum score is 48; the mean score is 36.9333; and the standard deviation is 4.18985. Kinesthetic is obtained the minimum score 24; the maximum score is 46; the mean score is 35.7000; and the standard deviation is 4.53723.

According to the scoring system introduced by Reid (1987), scores 38-50 showed major learning style preference, scores 25-37 showed minor learning style preference and scores 0-24 are categorized as negligible learning styles. As Table 4.3 showed the mean score for all learning styles were 35-37. Therefore, all learning styles were minor learning style preference for the students.

**Figure 4.2**

**The Bar Chart of the Students' Perceptual Learning Style Preferences**



Based on the figure 4.2. it shows that there are 18 students are auditory in the lowest bar, 20 students are kinesthetic in the middle bar and visual learners are 22 students in the tallest bar.

## 2. English Proficiency

The data related English Proficiency was taken from TOEFL test score as the result of documentation. The result of the TOEFL Test score is as follows:

**Table 4.4**

**The TOEFL test score**

<b>Subject</b>	<b>TOEFL Score</b>	<b>Subject</b>	<b>TOEFL Score</b>	<b>Subject</b>	<b>TOEFL Score</b>
<b>1</b>	497	<b>21</b>	430	<b>41</b>	393
<b>2</b>	450	<b>22</b>	470	<b>42</b>	477
<b>3</b>	497	<b>23</b>	450	<b>43</b>	427
<b>4</b>	530	<b>24</b>	413	<b>44</b>	470
<b>5</b>	487	<b>25</b>	450	<b>45</b>	420
<b>6</b>	500	<b>26</b>	453	<b>46</b>	447
<b>7</b>	427	<b>27</b>	450	<b>47</b>	527
<b>8</b>	476	<b>28</b>	410	<b>48</b>	403
<b>9</b>	410	<b>29</b>	410	<b>49</b>	403
<b>10</b>	533	<b>30</b>	420	<b>50</b>	500
<b>11</b>	417	<b>31</b>	453	<b>51</b>	367
<b>12</b>	467	<b>32</b>	373	<b>52</b>	440
<b>13</b>	490	<b>33</b>	407	<b>53</b>	417
<b>14</b>	497	<b>34</b>	373	<b>54</b>	430
<b>15</b>	450	<b>35</b>	410	<b>55</b>	420
<b>16</b>	413	<b>36</b>	413	<b>56</b>	437
<b>17</b>	413	<b>37</b>	450	<b>57</b>	390
<b>18</b>	460	<b>38</b>	440	<b>58</b>	407
<b>19</b>	377	<b>39</b>	430	<b>59</b>	503
<b>20</b>	433	<b>40</b>	477	<b>60</b>	393

Then the data was computed using descriptive statistic using SPSS 19.0 for windows. The result is as follows:

**Table 4.5**  
**The Frequency of TOEFL Test Score**

		TOEFL			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	367.00	1	1.7	1.7	1.7
	373.00	2	3.3	3.3	5.0
	377.00	1	1.7	1.7	6.7
	390.00	1	1.7	1.7	8.3
	393.00	2	3.3	3.3	11.7
	403.00	2	3.3	3.3	15.0
	407.00	2	3.3	3.3	18.3
	410.00	4	6.7	6.7	25.0
	413.00	4	6.7	6.7	31.7
	417.00	2	3.3	3.3	35.0
	420.00	3	5.0	5.0	40.0
	427.00	2	3.3	3.3	43.3
	430.00	3	5.0	5.0	48.3
	433.00	1	1.7	1.7	50.0
	437.00	1	1.7	1.7	51.7
	440.00	2	3.3	3.3	55.0
	447.00	1	1.7	1.7	56.7
	450.00	6	10.0	10.0	66.7
	453.00	2	3.3	3.3	70.0
	460.00	1	1.7	1.7	71.7
	467.00	1	1.7	1.7	73.3
	470.00	2	3.3	3.3	76.7
	476.00	1	1.7	1.7	78.3
	477.00	2	3.3	3.3	81.7
	487.00	1	1.7	1.7	83.3
	490.00	1	1.7	1.7	85.0
	497.00	3	5.0	5.0	90.0
	500.00	2	3.3	3.3	93.3

*Continued*

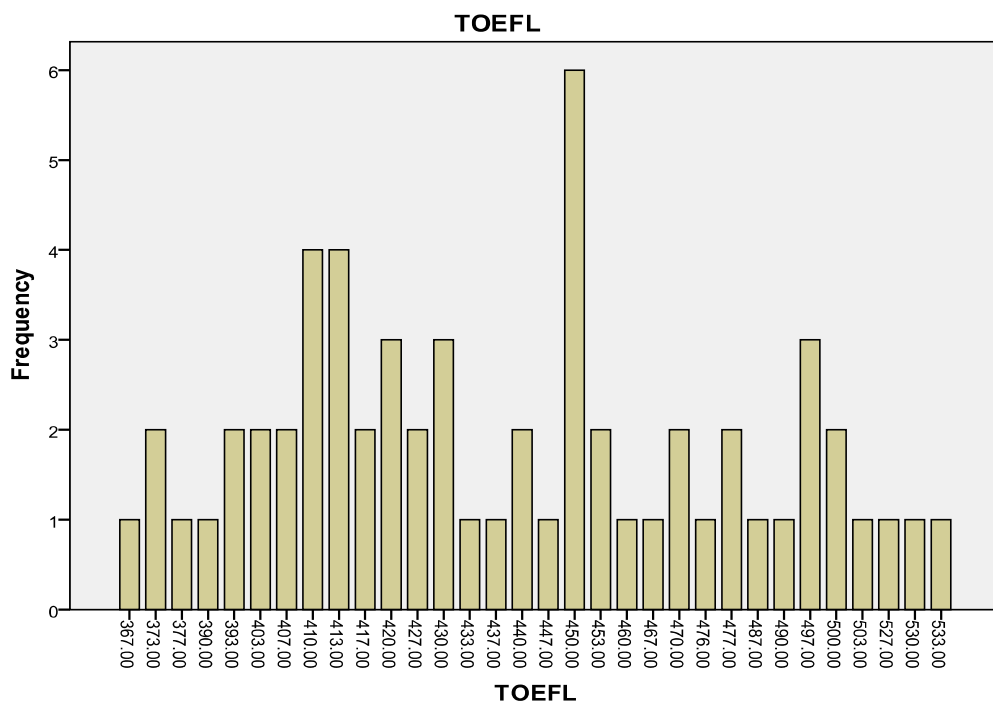
*Continuation*

503.00	1	1.7	1.7	95.0
527.00	1	1.7	1.7	96.7
530.00	1	1.7	1.7	98.3
533.00	1	1.7	1.7	100.0
Total	60	100.0	100.0	

The table 4.5 related to Students' TOEFL score above is figured in figure 4.3 below to make it easy to understand.

**Figure 4.3**

**The Bar Chart of the TOEFL Test Score**



The interpretation of table 4.5 and figure 4.3 will be presented in appendix 3.



**Table 4.6****The Descriptive Analysis of the TOEFL Test Score**

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
TOEFL	60	367.00	533.00	441.2833	40.62524
Valid N (listwise)	60				

Based on the table above, it shows that from the 60 students following TOEFL test, is obtained the minimum score is 367; the maximum score is 533; the mean score is 441.2833; and standard deviation is 40.62524. Based on the result of the TOEFL test, the researcher used the qualification as follows (carson, et al., 1990):

- a. Elementary : 310 - 420
- b. Low intermediate : 420 - 480
- c. High intermediate : 480 - 520
- d. Advanced : 525 – 677

From the descriptive analysis, it shows that the mean of TOEFL score of sixth semester of Students majoring in English Education Program is 441, which it means that their English Proficiency is in the Low Intermediate level. This level means that students of English Education Program Have the ability to understand simple, low frequency spoken English used in routine academic and social settings whit some characteristics such as Usually understand: simple or routine directions, short simple conversations, and short simple discussions on familiar topics; often identify and distinguish key words and phrases necessary to understand the general

meaning; and request the speaker to repeat, slow down, or rephrase speech when failing to comprehend

## B. Hypothesis Testing

As stated in chapter I, the null hypothesis research is “there is no correlation between perceptual learning styles and English proficiency” to find out whether the null hypothesis is accepted or rejected, the researcher used Pearson Product Moment Correlation using SPSS 19.0 for windows.

To test the hypothesis the guidance bellow was applied (Sujianto, 2009:53)

- If  $r\text{-count} > r\text{-table}$ , or  $\rho\text{-value in column sig. (2-tailed)} < \text{level of significant } (\alpha)$ , then  $H_a$  is accepted.
- If  $r\text{-count} < r\text{-table}$ , or  $\rho\text{-value in column sig. (2-tailed)} > \text{level of significant } (\alpha)$ , then  $H_o$  is accepted.

The analysis result as follows:

**Table 4.7**

### The Analysis Result of the Pearson Product Moment Correlation between Visual Learning Style and English Proficiency

		Visual	Proficiency
Visual	Pearson Correlation	1	.422**
	Sig. (2-tailed)		.001
	N	60	60
Proficiency	Pearson Correlation	.422**	1
	Sig. (2-tailed)	.001	
	N	60	60

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

Based on table 4.7; Visual learning style and English proficiency; the coefficient correlation is 0.422 that it means the correlation is moderate.

The *sig (2-tailed)* value, 0.001 is less than level of significance ( $\alpha$ ) 5% then  $H_{a1}$  is accepted and  $H_{o1}$  is rejected. It can be concluded that there is a significant correlation between visual learning styles preference and English proficiency. This means, increases or decreases in visual learning style significantly relate to increases or decreases in English proficiency.

**Table 4.8**  
**The Analysis Result of the Pearson Product Moment Correlation between**  
**Auditory Learning Style and English Proficiency**

		Correlations	
		Auditory	Proficiency
Auditory	Pearson Correlation	1	-.260
	Sig. (2-tailed)		.221
	N	24	24
Proficiency	Pearson Correlation	-.260	1
	Sig. (2-tailed)	.221	
	N	24	60

Based on the table 4.8. the researcher interpreted that there are 60 respondent for either auditory learning style and English proficiency; and the coefficient correlation is -0.260 that it means negative and low correlation. It can be concluded that when auditory learning style increases the participant English proficiency will decrease. *Sig (2-tailed)* value, 0.221 is greater than level of significance ( $\alpha$ ) 5% then  $H_{o2}$  is accepted, and  $H_{a2}$  is rejected. It can be concluded that there is no significant correlation between

auditory learning style preference and English proficiency. This means, increases or decreases in auditory learning style preference do not significantly relate to increases or decreases in English proficiency.

**Table 4.9**

**The Analysis Result of the Pearson Product Moment Correlation between Kinesthetic Learning Style and English Proficiency**

		<b>Correlations</b>	
		Kinesthetic	Proficiency
Kinesthetic	Pearson Correlation	1	-.098
	Sig. (2-tailed)		.458
	N	60	60
Proficiency	Pearson Correlation	-.098	1
	Sig. (2-tailed)	.458	
	N	60	60

Kinesthetic learning style and English proficiency; and the coefficient correlation is -0.098 that that it means negative correlation. It can be concluded that when kinesthetic learning style increases the participant English proficiency will decrease. *Sig (2-tailed)* value, 0.458 is greater than level of significance ( $\alpha$ ) 5% then  $H_0$  is accepted, and  $H_a$  is rejected. It can be concluded that there is no significant correlation between kinesthetic learning style preference and English proficiency. This means, increases or decreases in kinesthetic learning style do not significantly relate to increases or decreases in English proficiency.

### C. Discussion

1. The descriptive analysis of the students' perceptual learning style shows that 22 students (36.0%) preferred in visual learning style and the mean score is 35.1000. 18 students (30.0%) preferred in Auditory learning style and the mean score is 36.9333. and 20 students preferred in Kinesthetic learning style and the mean is 35.7000. It means that six semester students majoring in English Educational Program has no major learning preferences since the means of each learning style is fewer than 38. It means the three learning style is is minor preferences since it range in 25-37.
2. The descriptive analysis of the TOEFL test score shows that the mean score is 441.2833. This mean score is in the level 420-480. So, it can be said that the English Proficiency of students majoring in English Education Program of STAIN Tulungagung is low intermediate. This level means that students of English Education Program Have the ability to understand simple, low frequency spoken English used in routine academic and social settings whit some characteristics such as Usually understand: simple or routine directions, short simple conversations, and short simple discussions on familiar topics; often identify and distinguish key words and phrases necessary to understand the general meaning; and request the speaker to repeat, slow down, or rephrase speech when failing to comprehend.

3. There is correlation between Visual learning style preferences and English proficiency of students at English Educational Program of STAIN Tulungagung since the coefficient correlation is 0.422, it is in the moderate level. The *sig (2-tailed)* value, 0.001 is less than level of significance ( $\alpha$ ) 5% can be concluded that there is a significant correlation between visual learning styles preference and participant's English proficiency. The hypothesis testing show that  $H_{a1}$  is accepted and  $H_{o1}$  is rejected.
4. There is no significant correlation between auditory learning style preference and English proficiency. *Sig (2-tailed)* value, 0.221 is greater than level of significance ( $\alpha$ ) 5% then  $H_{o2}$  is accepted, and  $H_{a2}$  is rejected. Since the coefficient correlation is -0.260 that it means negative and very low correlation. It can be concluded that when auditory learning style increases the participant English proficiency will decrease.
5. There is no significant correlation between kinesthetic learning style preference and English proficiency. *Sig (2-tailed)* value, 0.458 is greater than level of significance ( $\alpha$ ) 5% then  $H_{o3}$  is accepted, and  $H_{a3}$  is rejected. Since the coefficient correlation is -0.098 that that it means very low negative correlation. It can be concluded that when kinesthetic learning style increases the participant English proficiency will decrease.

These findings corroborate the results of earlier research that higher levels of English proficiency prefer the visual mode (Cherry, 1981; Galbraith & James, 1984; Keefe, 1987; Reid, 1987). Similarly, the

more proficient language learner has probably had more exposure to the written word, and therefore, feels comfortable learning visually. In other word, students who have higher English proficiency is more interested in learning using their sight or use this style most of learning. Visual learners may learn by several way for example by reading book, see graph, chart, or by using LCD projector, etc.