The Influence of Grammatical Sensitivity and Learning Style on Writing Ability

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Abstract
This study was conducted to see the relationship of grammatical sensitivity and learning style on writing ability. A correlational research design was chosen as the design of this research with three variables to be tested, that is, grammatical sensitivity, learning style and writing ability. The data analysis showed that the mean score of grammatical sensitivity was 18.81 which is on medium level of grammatical sensitivity. Moreover, the students were mostly visual learning style students. Meanwhile, the writing test showed that they had good writing ability with mean score of the class 81.57. Based on the result of the data analysis of regression, it was found that 1) Partially, there is significant correlation between the students’ grammatical sensitivity and writing ability; 2) Partially, there is no significant correlation between students’ learning style and writing ability; 3) Simultaneously, there is a significant influence of grammatical sensitivity and learning style on students’ writing ability.

Keywords: Grammatical Sensitivity, Learning Style, Writing Ability, Correlational Research
INTRODUCTION

One of the essential skills in learning a language, for example English, is the skill of writing. However, some people believe that writing is difficult to learn and to teach, especially for those who learn English as the second or foreign language. As it has been known, the goal of teaching writing in the context of English as a foreign language is to produce a writing product as a communication mean (Septiana, 2015). Therefore, in university level, the students of English Departments usually take a series of writing courses in which they should learn how to write to communicate.

Further, in the writing course usually the students not only learn about how to write the content but also the organization of the writing. Moreover, however, (Naidu, 2007) stated that there are various degrees of grammatical errors in ESL students’ writing. They usually have a lot idea to share but there is no enough grammar to express it. Therefore, as it is stated by (Hyland, 2003), writing is usually seen as a product that combines the writer’s grammatical and lexical knowledge. Moreover, (Hyland, 2003) believes that writing is used as reinforcement of grammar in which those who can produce good writing usually have sensitivity to grammar.

(Piraud, 2011) stated that grammatical sensitivity is one language aptitude in which people can recognize the grammatical functions of words or phrases in a sentence. However, different people usually have different levels of grammatical sensitivity (Kormos, 2012). To know someone’s grammatical sensitivity, an aptitude test is usually done. Modern Language Aptitude Test or MLAT and Language Aptitude Battery can be the choices to test the grammatical sensitivity (Lightbown & Spada, 1990). Yet, these kinds of tests do not test only the grammatical sensitivity but also the aptitude in general. Moreover, the fee for the test is not economical. Therefore, (Sulistyo, 2015) suggested to use the Section II of TOEFL test, the Structure and Written Expression, to test the grammatical sensitivity since both parts in this section require the test takers to be sensitive on grammatical accuracy and appropriate grammatical styles.
Since the grammatical sensitivity can be tested using TOEFL test section II, it is clearly shown that it will deal with the grammatical accuracy especially in writing. Grammatical accuracy in writing, as mentioned by (Baleghizadeh & Gordani, 2012), is an essential aspect to have a good writing. However, it may be unrealistic to have 100% accuracy in the writing, especially for the ESL or EFL writers.

Further, students’ ability to write is also affected by the learning style. As it has been known, learning style will affect the proper teaching method applied to the students and further students can broaden their knowledge based on their learning style. However, the impact of individual differences of learning styles on foreign language writing has been neglected (Forbes, 2019).

There are many classification of learning style as it is viewed by (Srijongjai, 2011) such as visual, aural, verbal, physical, logical, social and solitary. Yet, in this present study, we take the learning style as it is viewed by (DePorter et al., 1999) in (Ningrum et al., 2016) that can be classified into three, visual, auditory and kinesthetic (V-A-K).

In relation to the background stated above, this study is conducted to see the relationship of grammatical sensitivity and learning style on writing ability.

METHOD

In order to answer the question of this research, a correlation research design is used to measure the relationship of grammatical sensitivity and learning style on students’ writing ability. A correlational research design is suitable for this study since it made use of all the levels of variables measured that is in line with what was stated by Borg, et al. (1993) in (Latief, 2012).

There are three variables to be measured in this research namely grammatical sensitivity, learning style and writing ability. To ease the understanding, the variables can be symbolized as follows:

\[ X_1 = \text{grammatical sensitivity} \]
\[ X_2 = \text{learning style} \]
\[ Y = \text{writing ability} \]
This research was conducted at English Education Department of Universitas Bhinneka PGRI. The population of this research was the second semester students of English Education Department. There were 50 students who became the population. However, for the sake of this research, the researcher conducted a purposive sampling so that the students of 2A was taken as the sample of this research. Therefore, there are 21 students who became the sample of this research.

Since this research was a correlational research, the procedure to conduct this research was by taking the data of the three variables of the research. So, the procedure was started by setting up the research instruments which consist of three test. The first test was the grammatical sensitivity, the second test was learning style questionnaire and the last test is the writing test.

Further, after the instruments were ready to use, the researcher administered the three test to the students who become the sample of this research. After the tests are administered, the result of the tests were recorded and analyzed to find out the relationship among the three variables.

In this study, the researcher became the complete participant who totally involve in the process of teaching and learning. Here, the researcher did not only teach but he also gave tests to the students to collect data. The data were collected from the grammatical sensitivity test, learning style questionnaire and writing test. Grammatical sensitivity test and learning style questionnaire were taken in one meeting while the writing test was conducted in another meeting after that. After the assessments processes were all done, the researcher noted the students’ score in all
tests. Later on, the score of the grammatical sensitivity, learning style and writing is analyzed to know the correlation among the three variables.

Data analysis was aimed at testing the research hypothesis. The data of the grammatical sensitivity, learning style and writing ability were analyzed. The initial steps of the data analysis was the descriptive analysis. It was conducted to see the minimum score, maximum score, mean, median, mode and standard deviation. The scores were statistically analyzed using SPSS 26.0.

Further, to test the hypotheses, the statistical analysis of Pearson Product moment and regression was conducted using SPSS 26.0. Pearson product moment was used to test the correlation between variable X1 and Y and also the variable X2 and Y. While the linear regression used to see the influence of variables X1 and X2 on variable Y.

**FINDING AND DISCUSSION**

This research was aimed at investigating the correlation between grammatical sensitivity and learning style on students’ writing ability. There were three instrument that were used to collect the data, grammatical sensitivity test, learning style questionnaire and writing test. The result of the data taken were as follows:

1. **Grammatical sensitivity test**

   There were 21 students who followed the test and there were 30 error analysis questions to be done. Thus, the maximal score to be obtained from the test was 30 and the result can be seen in Table 1 below.

   |          | N   | Minimum | Maximum | Mean | Std. Deviation |
|----------|-----|---------|---------|------|----------------|
| Grammatical_sensitivity | 21  | 8       | 25      | 18.81| 6.178          |
| Valid N (listwise)      | 21  |         |         |      |                |

From the table 1 above, it can be seen that from 21 students followed the test, the minimum score was 4 and the maximum score was 25. No one can reach the maximal score of 30. Meanwhile, the mean score of the grammatical sensitivity test was 18.81. The mean score of grammatical sensitivity can be categorized into middle range sensitivity of grammar.
2. Learning style questionnaire

Next instrument to collect the data was the learning style questionnaire. This questionnaire was a close questionnaire in which the students who did the questionnaire should do 24 questions by choosing often, sometimes or seldom. The option often had 5 points, sometimes had 3 points and seldom had 1 point. For each learning style, there were certain numbers that showed which one showed each learning style. The result of the learning style questionnaire can be seen on Table 2 below.

| Table 2. Learning Style |
|--------------------------|
| Frequency | Percent | Valid Percent | Cumulative Percent |
| Visual | 11 | 52.4 | 52.4 | 52.4 |
| Auditory | 4 | 19.0 | 19.0 | 71.4 |
| Tactile | 6 | 28.6 | 28.6 | 100.0 |
| Total | 21 | 100.0 | 100.0 |  |

From Table 2 above, it can be seen that the learning style questionnaire resulting on 11 visual students or 52.4% students were visual, 4 auditory students or 19% students were auditory and 6 tactile students or 28.6% students were tactile. Therefore, the visual students dominate the class which means that most of them learn by observing or seen something.

3. Writing test

The last instrument to take data was writing test. Here, the students should write a cause and effect essay. In the essay, the students wrote an essay with topic ‘learning for home during pandemic’. The result of the writing test can be seen in Table 3 below.

| Table 3. Descriptive Statistics |
|---------------------------------|
| N | Minimum | Maximum | Mean | Std. Deviation |
| Writing_score | 21 | 68 | 92 | 81.57 | 7.124 |
| Valid N (listwise) | 21 | | | |

From Table 3 above, it can be seen that there were 21 students did the writing test. The result show that the minimum score was 68 while the maximum
score of the students was 92. Meanwhile, the mean score of the class was 81.57 which is categorized into good writing ability.

4. Hypothesis Testing
Before conducting hypothesis testing, the fulfillment of classical assumption analysis should be done. Here, the fulfillment of the classical assumption conducted were the normality test and homogeneity as follow:

1. Normality test

| Table 4. Tests of Normality |
|-----------------------------|
| Learning_style | Grammatical_sensitivity | Kolmogorov-Smirnov | | Shapiro-Wilk | |
|                |                          | Statistic | df | Sig. | Statistic | df | Sig. |
| Visual         |                           | .177      | 11 | .200* | .860      | 11 | .058 |
| Auditory       |                           | .223      | 4  |      | .954      | 4  | .742 |
| Kinesthetic    |                           | .254      | 6  | .200* | .863      | 6  | .199 |
| Writing_score  |                           | .173      | 11 | .200* | .933      | 11 | .441 |
| Visual         |                           | .142      | 4  |      | .997      | 4  | .991 |
| Auditory       |                           | .258      | 6  | .200* | .848      | 6  | .152 |

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

From table 4 above, the normality test of Kolmogorov Smirnov and Shapiro-Wilk, it can be seen that all of the significant value of grammatical sensitivity and writing score of the students were above 0.05. It means that both data on grammatical sensitivity and writing ability can be considered as normal.

2. Homogeneity Test

| Table 5. Test of Homogeneity of Variances |
|------------------------------------------|
|                                  | Grammatical_sensitivity | Based on Mean | Levene Statistic | df1 | df2 | Sig. |
|                                  |                           | 1.090         | 2              | 18  | .357 |
|                                  |                           | 1.082         | 2              | 18  | .360 |
|                                  |                           | 1.082         | 2              | 16.669 | .361 |
|                                  |                           | 1.116         | 2              | 18  | .349 |
|                                  | Writing_score            | Based on Mean | .304           | 2   | 18   | .742 |
|                                  |                           | .239          | 2              | 18  | .790 |
|                                  |                           | .239          | 2              | 16.260 | .790 |
|                                  |                           | .277          | 2              | 18  | .762 |
Table 5.5 above show that the significant value of Levene’s statistics for both grammatical sensitivity and writing were above 0.05. When it is above the level of significance 0.05, we can conclude that the data were homogeneous.

Since the data were both normal and homogeneous, the hypotheses were then analyzed using the parametric statistical analysis. Here, the researched used the linear regression of SPSS 26.0 that is as follow.

Table 6. Correlations

|                  | Writing_score | Grammatical_sensitivity | Learning_style |
|------------------|---------------|-------------------------|----------------|
| Pearson Correlation | Writing_score | 1.000                   | .572           | -.206          |
|                  | Grammatical_sensitivity | .572                   | 1.000          | -.036          |
|                  | Learning_style       | -.206                   | -.036          | 1.000          |
| Sig. (1-tailed)  | Writing_score | .             | .003           | .185           |
|                  | Grammatical_sensitivity | .003                   | .              | .438           |
|                  | Learning_style       | .185                    | .438           | .              |
| N                | Writing_score | 21                   | 21             | 21             |
|                  | Grammatical_sensitivity | 21                   | 21             | 21             |
|                  | Learning_style       | 21                     | 21             | 21             |

From table 6 above, it can be seen that coefficient of the correlation between grammatical sensitivity and writing ability was 0.572. It means that the correlation was in a medium positive correlation. Thus, we can conclude that the better students’ grammatical sensitivity, the better they can write in English. Meanwhile, the coefficient of the correlation between learning style and writing ability was -.206. It means that the correlation was low negative correlation. Thus, we can conclude that the learning style do not affect students’ writing ability.

Table 7. Coefficients

| Model         | Unstandardized Coefficients | Standardized Coefficients |
|---------------|----------------------------|----------------------------|
|               | B  | Std. Error | Beta | t    | Sig.  |
| 1 (Constant)  | 71.940 | 5.128         | 14.030 | .000 |
| Grammatical_sensitivity | .652 | .217 | .565 | 2.998 | .008 |
| Learning_style | -1.491 | 1.510 | -.186 | -.987 | .337 |

a. Dependent Variable: Writing_score
From the table 7 above, we can conduct the hypothesis testing:

1. Grammatical Sensitivity and Writing Ability

Ha: There is significant correlation between grammatical sensitivity and writing ability  
   (Ha : β1 ≠ 0)

Ho: There is no significant correlation between grammatical sensitivity and writing ability  
   (Ho : β1 = 0)

   If the significant value ≤ α, it means that H0 is rejected. Meanwhile, if the significant value > α, it means that H0 is accepted. Since it used two tailed test, the α/2 = 0.025. The significant value of grammatical sensitivity was 0.08. Since it is lower than 0.025, it can be concluded that H0 is rejected. Thus, there is significant correlation between grammatical sensitivity and writing ability.

2. Learning style and writing ability

Ha: There is significant correlation between learning style and writing ability  
   (Ha : β1 ≠ 0)

Ho: There is no significant correlation between learning style and writing ability  
   (Ho : β1 = 0)

   If the significant value ≤ α, it means that H0 is rejected. Meanwhile, if the significant value > α, it means that H0 is accepted. Since it used two tailed test, the α/2 = 0.025. The significant value of learning style was 0.337. Since it is higher than 0.025, it can be concluded that H0 is accepted. Thus, there is no significant correlation between learning style and writing ability.

Table 8. Model Summary

| Model | R     | R Square | Adjusted R | Std. Error of | Change Statistics |
|-------|-------|----------|------------|---------------|-------------------|

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From the table above, we can conduct the hypothesis testing for the third hypothesis.

Ha: There is significant simultaneous influence of grammatical sensitivity and learning style on writing ability (Ha : β1 ≠ 0).

H0: There is no significant simultaneous influence of grammatical sensitivity and learning style on writing ability (H0 : β1 = 0)

Based on the hypothesis above, if F count ≤ F table, it means that H0 is accepted. Meanwhile, if F count > F table, it means that H0 is rejected. F table for this test was 3.68. Since the F count was 5.085, it means that F count > F table (5.085 > 3.68). Thus, H0 is rejected and it means that there is significant simultaneous influence of grammatical sensitivity and learning style on writing ability.

**Discussion**

The result of the data analysis showed that the students who became the sample of this research were divided into three learning style; visual, auditory and kinesthetic. Since most of the students was categorized into visual learner, it means that most of the students prefer to learn by what they see. Further, for the grammatical sensitivity, the mean score of the class was 18.81 which is categorized into medium level of grammatical sensitivity. Finally for the writing ability of the students, the mean score was 81.57 which means that the students have good writing ability.

Next, if we see the result of the hypothesis testing, the first hypothesis on grammatical sensitivity and writing ability resulted on the significant correlation.
between the grammatical sensitivity and writing ability. It means that the better grammatical sensitivity the students have, the better they can write in English. However, the coefficient of the correlation which was 0.572 means that it was on medium positive correlation. This finding supports the finding of (Septiana, 2015; Septiana et al., 2016) who also found that the coefficient of the correlation between grammatical sensitivity and writing ability was on medium positive correlation.

Further to discuss was the hypothesis testing on the second hypothesis that is learning style and writing ability. The statistical analysis resulted on the low negative correlation with the coefficient of the correlation -0.206. This finding shows the partially there is no significant correlation between learning style and writing ability. Those who have visual learning style have the same ability in writing as those in auditory and kinesthetic learning style. However, as it is suggested by (Srijongjai, 2011), writing teacher should manage the class to facilitate the different learning style of the students so that they can get their maximum achievement on writing.

Finally, the last hypothesis to be tested was the simultaneous influence of grammatical sensitivity and learning style on writing ability. It resulted on the F count which was higher than the F table. Thus, it can be concluded that there is significant simultaneous influence of grammatical sensitivity and learning style on writing ability. Different from the partial correlation which was not significant, the simultaneous influence showed that grammatical sensitivity and learning style influence students’ writing ability. Grammatical sensitivity as it is discussed on chapter II is actually one of the language aptitudes which brings differences on the language learners. Different students may have different grammatical sensitivity level and different learning style. Some students with high level of grammatical sensitivity may be categorized into visual, auditory as well as kinesthetic.

Seeing the result of the hypothesis testing above, it is important for the English teacher especially the writing teacher to mind the students’ differences both in language aptitude and other difference such as learning style. As it is stated by (Bernhardt & Krashen, 1989) that the differences on language aptitude such as grammatical sensitivity may result on the different understanding on the language
learning. Appropriate training should be made as stated by (Septiana, 2015) to help students to have better achievement on language learning.

CONCLUSION

This present study was aimed at investigating the correlation between grammatical sensitivity and writing ability, the correlation between learning style and writing ability as well as the simultaneous influence of grammatical sensitivity and learning style on students’ writing ability. The result of the data analysis show that the students who were taken as subject had medium level of grammatical sensitivity. They also were divided into three learning style, with most of the students had visual learning style. Further, the hypothesis testing showed that partially there is significant correlation between grammatical sensitivity and writing ability. Meanwhile, the variable learning style and writing ability showed that there is no significant correlation between them. Finally, simultaneously, there is significant influence of grammatical sensitivity and learning style on students’ writing ability.

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