Analysis of Non-English Majors’ Individual Differences in Writing Proficiency in Private Colleges

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Based on the theory of individual differences, this study is designed to investigate the influence of gender and learners’ L2 proficiency on non-English majors’ writing proficiency. A timed writing test is carried out among 130 participants from Ningbo Dahongying College. After the collection of the writing samples, all valid samples are subjectively rated, and syntactic errors are calculated. Afterwards, with assistance of SPSS 19.0, the major findings of the study are as follows: First, female students excel male students in writing proficiency which is reflected by syntactic accuracy. To be specific, female students do much better in agreement in terms of syntactic accuracy. Second, high L2 proficiency group outperforms low L2 proficiency group in writing proficiency. Specifically, high L2 proficiency group does much better in the following specific aspects in terms of syntactic accuracy: agreement and use of predicate verbs.

Keywords: individual differences, English as a Second Language (ESL) writing, non-English majors

Introduction

College English writing teaching has been appealing to many researchers and various teaching methods have been used which intend to teach English writing more effectively. However, no satisfying method has been found so far. Since the 1970s, the research focus of L2 teaching and learning has shifted from teachers’ teaching to learners’ learning. The learners’ individual characteristics and their impacts on the process of L2 acquisition have been valued highly. In recent years, researchers both at home and abroad have conducted various studies to analyze the learners’ individual differences and their influences on L2 acquisition. In these previous researches, the subjects range from university students, native English speakers to many others. However, there are few researches on individual differences among private college students in their writing proficiency. The author believes that it is worth conducting a study to analyze private college students’ individual differences in their writings.

Theoretical Background

Individual Learner Differences in Second Language Acquisition

The term “Individual Differences”, which is originated from psychology, refers to the relatively stable and different physiological and psychological features of human beings in the process of a series of mental activities.
such as recognition, emotion and will, etc. (ZHU, 1989). While in second language acquisition, the term “individual learner differences” mainly means the differences in the process of the learner learning an L2, such as differences in how they learn it, and how successful they are. Since the 1950s, the functions of individual learner differences have been appealed to various scholars (Ellis, 1989, 1994; Larsen-Freeman & Long, 1991; Skehan, 1989). They have done the research in this field and made the great achievement. The research on individual learner differences has been one of the research focuses in second language acquisition.

Factors of Individual Learner Differences

Different scholars classified the individual differences in different ways. However, such differences as learners’ motivation, strategies and language learning aptitude are generally acknowledged by most researchers. The differences can be cognitive, affective, or social in nature (Ellis, 1994). In fact, researchers have already identified a veritable plethora of individual learner variables. It is impossible to list all variables here. But, the following is the main variables mentioned in three surveys.

Altman (1980) pointed out that the factors influencing individual learner differences can be mainly concluded as follows: age, sex, proficiency in native language, language aptitude, motivation, language learning strategies, previous experience with language learning. Skehan (1989) listed the following as factors influencing individual learner differences: motivation, learning strategies, language aptitude, and cognitive styles. Larsen-Freeman and Long (1991) concluded the following factors in their study: age, sex, personality factors, cognitive factors, and learning strategies.

The above list shows that the factors influencing individual learner differences vary according to the different researches with the different methods, however, such factors as age, sex, learning strategies, motivation, and aptitude are universally accepted. In the present study, the author chooses the factor of gender and learners’ L2 proficiency as the factors of individual learner differences, and then discusses the relationship between these two factors and learner’s writing proficiency.

Methodology

Based on the purpose of the study, this paper intends to make an analysis of the data collected with the help of the software SPSS 19.0, aiming to find out the hints of the following questions. First, are there any differences of writing proficiency among non-English majors by the influence of the two individual factors: gender and L2 proficiency? Second, if there are, how these differences are displayed in terms of syntactic accuracy?

The subjects of the current study are non-English major sophomores from Ningbo Dahongying College. These subjects are all Chinese native speakers and have experienced CET4. According to their previous CET4 scores, 65 subjects (31 males + 34 females) with CET4 scores higher than 400 were chosen to be served as high L2 proficiency group. And other 65 subjects (31 males + 34 females) with CET4 scores lower than 350 were chosen to be served as low L2 proficiency group.

These 130 subjects are required to attend one same writing test. Finally, according to the validity of the sample writing, only 120 subjects are chosen in present study, and 30 subjects in each group. Some samples are invalid for the following reasons: The essay is too short; the handwriting is difficult to identify.

The sample writings are marked subjectively according to the rating scale in CET4. The total score is 15. Two raters who have been engaged in college English teaching for several years and have been experienced in
rating writings are responsible for rating the writing. Each writing will be rated by the two raters in order to make the final score more reliable. So the writing score applied in the present study is the average of the two raters’ scores, if the gap between the two scores is less than three points. Otherwise, a third rater will rate the writing again.

The quantitative method is to be used to give a detailed analysis of the data collected from the present study. The statistical method of Univariate Analysis of Variance will be applied to analyze the differences and statistical significance in writing proficiency among the non-English majors of different gender and different L2 proficiency.

Result and Discussion

Differences of Writing Proficiency Among Non-English Majors

The first research question is that: Whether there are some differences of writing proficiency among non-English majors by the influence of the two individual factors: gender and L2 proficiency? Aiming to answer the first question, the following two sub-questions will be answered respectively: First, whether there are differences of writing proficiency between high and low L2 proficiency students? Second, whether there are differences of writing proficiency between male and female students? Now the author is going to discuss these two questions respectively.

In order to investigate the influence of the two factors—gender and L2 proficiency on writing proficiency, the author used Univariate Analysis of Variance to compare the writing scores of the four groups. Here, the dependent variable is writing score, and the two fixed factors are gender and L2 proficiency. The results were showed in Table 1 and Table 2.

Table 1
Results of Descriptive Statistics for Writing Scores

| Gender | L2 proficiency | N  | Means | Std. error |
|--------|----------------|----|-------|------------|
| Female | Low            | 30 | 7.7000| 0.83666    |
|        | High           | 30 | 10.1000| 0.84600    |
|        | Total          | 60 | 8.9000| 1.46658    |
| Male   | Low            | 30 | 6.3833| 1.26412    |
|        | High           | 30 | 9.4500| 0.91303    |
|        | Total          | 60 | 7.9167| 1.89372    |
| Total  | Low            | 60 | 7.0417| 1.25310    |
|        | High           | 60 | 9.7750| 0.92711    |

Table 2
Tests of Between-Subjects Effects (Dependent Variable: Writing Score)

| Source          | Type III sum of squares | df | Mean square | F    | Sig. |
|-----------------|-------------------------|----|-------------|------|------|
| Correct model   | 256.475a                | 3  | 85.492      | 89.329| 0.000|
| Gender          | 29.008                  | 1  | 29.008      | 30.310| 0.000|
| L2 proficiency  | 224.133                 | 1  | 224.133     | 234.194| 0.000|
| Gender * L2 proficiency | 3.333             | 1  | 3.333       | 3.483 | 0.065|
Differences of writing proficiency between high and low L2 proficiency students. As is demonstrated in Table 1, an overall image of the writing of high L2 proficiency students and low L2 proficiency students is displayed. In the 60 writings of high L2 proficiency students, the mean is 9.7750, while in the 60 writings of low L2 proficiency students, the mean is 7.0417. The mean score of high L2 proficiency group is 2.7333 higher than that of low L2 proficiency group. Therefore, a great difference of the writing scores between high and low L2 proficiency group is presented. In order to examine whether the huge difference is statistically meaningful or not, Univariate Analysis of Variance was adopted as a measure and the results are listed in Table 2.

Table 2 is a Univariate Analysis of Variance performed on the scores of the writing test, which shows a statistically significant difference between high and low L2 proficiency group at the 0.050 level ($F = 234.194, p = 0.000 < 0.050$). It indicates that learners’ different L2 proficiency has a great impact on their writing scores: The learner with higher L2 proficiency has higher writing proficiency.

To sum up, as to the writing scores of holistic writing, the writing proficiency of low L2 proficiency group lags behind that of high L2 proficiency group, and the difference is significant and obvious.

Differences of writing proficiency between female and male students. Now, the second sub-question that whether there are differences of writing proficiency between male and female students is to be discussed in the following. Table 1 also shows the mean writing score of female and male students. In the 60 writings of female students, the mean score is 8.9000. The mean score of male students in the 60 writings is 7.9167, which is 0.9833 lower than that of female students. Though the difference of mean score in writing between female and male students is not very significant, the result of Univariate Analysis of Variance reveals in Table 2 that the factor—gender has a significant impact on the score of writing, for the significance of gender is $0.000 < 0.050$. Therefore, female students outperform male students in writing score. The result is consistent to XU, YUAN, and LI’s (2007) study, in which the conclusion that female students have a better writing proficiency has been made. It can be concluded from the above analysis that the writing proficiency of female students is higher than that of male students in private colleges, and the difference is statistically significant and meaningful.

Differences in Syntactic Accuracy

The second research question is that: How these differences are displayed in terms of syntactic accuracy? As is mentioned in the previous section, the factors of gender and L2 proficiency are mainly discussed in present study. Therefore, the following two questions are to be discussed respectively: First, what are the differences of syntactic accuracy between high and low L2 proficiency students? Second, what are the differences of syntactic accuracy between male and female students?

Syntax is a word derived from Greek, which consists of two morphemes: syn (together) and tax (arrangement). In linguistics, the word syntax refers to the rules governing the way words are combined to form a sentence in a language or simply the study of the formation of the sentence. Syntactic accuracy mainly refers to the correctness both in sentence structure and word order, which is the essential element to produce a composition “coherent in discourse” that is listed in the basic requirement for writing in College English Curriculum Requirements.

In the present study, the author is going to analyze syntactic accuracy through the comparison of syntactic errors among the four groups. Syntactic errors counted in the writings are mainly as follows: disagreement,
misuse of predicate verbs, and error of dependent clauses, word order, lack of subject and other errors. The total number of the syntactic errors in each writing is collected respectively. The author used Univariate Analysis of Variance to compare the syntactic errors among the four groups, and the results were showed in Table 3 and Table 4.

Table 3

| Gender | L2 proficiency | N   | Means  | Std. error |
|--------|----------------|-----|--------|------------|
| Female | Low            | 30  | 4.2333 | 2.48698    |
|        | High           | 30  | 1.9000 | 1.26899    |
|        | Total          | 60  | 3.0667 | 2.28382    |
| Male   | Low            | 30  | 6.6667 | 2.61736    |
|        | High           | 30  | 2.3667 | 1.77110    |
|        | Total          | 60  | 4.5167 | 3.09998    |
| Total  | Low            | 60  | 5.4500 | 2.81295    |
|        | High           | 60  | 2.1333 | 1.54554    |
|        | Total          | 120 | 3.7917 | 2.80724    |

Table 4

| Source                  | Type III sum of squares | df  | Mean square | F      | Sig.  |
|-------------------------|-------------------------|-----|-------------|--------|-------|
| Correct model           | 422.092                 | 3   | 140.697     | 31.648 | 0.000 |
| Gender                  | 63.075                  | 1   | 63.075      | 14.188 | 0.000 |
| L2 proficiency          | 330.008                 | 1   | 330.008     | 74.231 | 0.000 |
| Gender * L2 proficiency | 29.008                  | 1   | 29.008      | 6.525  | 0.012 |

Differences of syntactic accuracy between high and low L2 proficiency students. Table 3 is the detailed descriptive statistics of the syntactic errors committed by each group. The mean of syntactic errors in low L2 proficiency group is 5.450, while the mean in high L2 proficiency group is 2.1333 with 3.3167 lower than that in low L2 proficiency group. It is clear to see that there is a great gap in the mean of syntactic errors between the two groups. Table 4 is the test of between-subjects effect, and L2 proficiency serves as one of the fixed factors. From the table, it can be seen that the significance of L2 proficiency is 0.000 < 0.050, which indicates that L2 proficiency has a significant influence on syntactic error. To summarize, the quantity of syntactic errors in the writings of low L2 proficiency group outnumbers that in high L2 proficiency group. The differences of syntactic accuracy between high and low L2 proficiency group are great and statistically meaningful. The high L2 proficiency group outperforms low L2 proficiency group in syntactic accuracy.

In order to demonstrate the differences in syntactic accuracy more specific, the author makes the comparison of specific errors in syntax between the high and low L2 proficiency groups and the errors which make significant difference are to be discussed in detail in the following.

After the performance of Univariate Analysis of Variance, the misuse of “predicate verbs” shows the most significant difference between the two groups. The error of predicate is quite common in low L2 proficiency group, especially the use of model verb, link verb, or an auxiliary verb. In English, a sentence should contain at least one form of a verb. However, in Chinese, there is no such grammatical rule. Some examples are
demonstrated below:

(1) The phenomenon of exam cheating is become more and more serious.
(2) There are some students cheat in exams at school.
(3) We often need to take exam, when we at school or in the company.
(4) We should to study hard.

There is a redundancy error in sentence (1), for the word “is” and “become” cannot be used together. Biber Johansson, and Leech (2000) pointed out “As an auxiliary verb, ‘be’ has two different functions: making continuous aspect and passive voice” (p. 428). The word “is” is redundant in sentences (1). The correct form of the sentence should be either “The phenomenon of exam cheating becomes more and more serious” or “The phenomenon of exam cheating is becoming more and more serious”. In sentence (2), there is no need to use a “there be” pattern, otherwise the auxiliary verb “are” and verb “cheat” are used together in one simple sentence, which violates the English grammatical rules. The right one should be “Some students cheat in exams at school”. In sentence (3), the predicate verb is omitted wrongly. The correct form should be “We often need to take exam, when we are at school or in the company”. In sentence (4), model verb “should” is required to be followed by an original form of the verb instead of an infinite. Therefore, the correct form should be “We should study hard”.

From the above analysis, it can be seen that most errors of predicate are related to link verb or an auxiliary verb. Students are confused of the usage of link verb or an auxiliary verb. In Chinese, a link verb or an auxiliary verb is not needed, so learners omit them with unconsciousness.

Errors in agreement rank the second significant difference between the two groups, which is showed by the result of Univariate Analysis of Variance. In linguistic, agreement which is also called concord refers to the agreement between words or other grammatical elements in number, person, or gender. Agreement is an important grammatical rule, which should be followed when a sentence is made. Subject-predicate agreement is the agreement between subject and predicative verb in number. To be more specific, the verb in sentence must match the subject in number. In the writings of low writing proficiency group, errors of subject-predicate agreement are found much more frequently than that in high writing proficiency group. Some examples are demonstrated below:

(5) I think the student don’t study hard.
(6) Examination cheating become a part of our lives.
(7) Some students are lazy and lacks self-confidence.

In sentence (5), “the student” is in singular form, so the verb followed should be in singular form too. The correct one should be “I think the student doesn’t study hard”. It is the same in sentence (6), the verb “become” should be replaced by “becomes”, because the subject “examination cheating” is regarded as a singular form. In sentence (7), “some students” is a plural noun, so the verb “lack” should agree with them in plural form. The right form is “Some students are lazy and lack self-confidence”. The predicate “lack” is in accordance with its subject “some students”.

From the above analysis, it is clear to see that in English, subject-predicate agreement should be strictly followed in the sentence, and the subject in sentence determines concord. By contrast, in Chinese there is no such strict agreement between the subject and the predicate. There is no need to change the form of the verb whether the subject is plural or singular. Such differences between Chinese and English are likely to influence learners’ ability
of agreement in sentence. This may explain that the disagreement error frequently occurs in students’ writings.

**Differences of syntactic accuracy between female and male students.** In order to investigate the differences of syntactic accuracy between female and male students, the author will review Table 3 and Table 4. Table 3 also presents the mean syntactic errors of female and male students. In the 60 writings of female students, the mean is 3.0667. The mean syntactic errors in the 60 writings of male students is 4.5167, which is 1.45 higher than that of female students. That is to say, the male students commit more syntactic errors than female in writing. Table 4 is the result of Univariate Analysis of Variance, which shows that the fixed factor gender has a significant impact on syntactic errors, for the significance of gender is 0.000 < 0.050. To summarize, the female group does much better than male group in syntactic accuracy in writing. And the differences between the two groups are obvious and statistically meaningful.

According to the above analysis, it can be concluded that there are significant differences in syntactic accuracy between male and female students. In order to investigate the syntactic accuracy more specific, the following part is going to discuss the specific errors of syntax committed by the students. The author is only going to analyze the significant errors which reflect the differences of syntactic accuracy between the two groups. After performance of the Univariate Analysis of Variance, only one type of error was found to show significant differences between female and male groups. That is disagreement. Female group does much better than male group in terms of agreement. The examples of disagreement have been showed in previous part.

**Conclusion**

The present study has proved that the learners’ proficiency of L2 will influence their writing proficiency, which will be reflected by syntactic accuracy. In this case, the teachers should take this difference into consideration when designing the teaching plan in writing. Therefore, if the students are in low L2 proficiency, the teachers should assign more teaching time to their writing, for their writing proficiency was proved to be in a rather low level, which was showed in present study. Special focus should be given on the syntactic accuracy in writing class. In addition, the present study has also indicated that there are gender differences in students’ writing proficiency. Male students are weaker in writing proficiency. Therefore, when teaching non-English majors, the teacher should take the gender differences into account, and try to lessen the gap between female and male students in writing. The following instructions may adopted by the teachers to help the male students keep up with female students in writing. First, data in previous section reveals that male students commit more errors such as disagreement of subject-predicate which is closely related with English grammatical rules. That is to say, male students lack the knowledge of comprehensive English grammar and they often confused some grammatical rules with others. So the teachers should have a clear interpretation of grammar to the students. In addition, more opportunities of communication in class should be provided to the male students to develop their initiative and interest in English learning.

**References**

Altman, H. (1980). Foreign language teaching: Focus on the learner. In H. Altman & C. James (Eds.), *Foreign language teaching: Meeting individual needs* (pp. 30-45). Oxford: Pergamon.

Biber, D., Johansson, S., & Leech, G. (2000). *Longman grammar of spoken and written English*. Beijing: Foreign Language Teaching and Research Press.
Ellis, R. (1989). Classroom learning styles and effect on second language acquisition: A study of two learners. *System*, (7), 249-262.

Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.

Larsen-Freeman, D., & Long, M. (1991). *An introduction to second language acquisition research*. Essex: Longman Group.

Skehan, P. (1989). *Individual differences in second language acquisition*. London: Edward Arnold.

XU, B. F., YUAN, F. S., & LI, T. (2007). A study of the gender differences of testing skills of English learners in Chinese TEM4. *Foreign Language Teaching Abroad*, (3), 34-41.

ZHU, Z. X. (1989). *A dictionary of psychology*. Beijing: Peking Normal University Press.