

A Study on the Relationship among Senior High School English Learners' Prefabricated Chunks, Writing Anxiety and Writing Achievements

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Abstract

English writing can be affected by students' affective factors and their prefabricated chunks. Recently, many researchers have studied the relationship between writing anxiety and English writing achievements, prefabricated chunks and writing anxiety, and prefabricated chunks and English writing achievements. However, there are few studies on the relationship among these three variables. This research aims to answer the following questions: 1. What is the current situation of senior high English learners' prefabricated chunks, writing anxiety and writing achievements? 2. What are the correlations among their prefabricated chunks, writing anxiety and writing achievements? 3. Does writing anxiety play a mediating role between prefabricated chunks and writing achievements? If so, to what extent? Based on the affective filter hypothesis and prefabricated chunks theory, this study chose 174 senior high English learners to complete the English writing anxiety questionnaire and a mid-term test. The results show that: 1. Senior high English learners' prefabricated chunks are at a middle level. Their writing anxiety is at a relatively high level. And their writing achievements are at a medium level. 2. There is a negative correlation between prefabricated chunks and writing anxiety, between writing anxiety and writing achievements. And prefabricated chunks and writing achievements are positively correlated with each other. 3. Writing anxiety has a mediating effect between prefabricated chunks and writing achievements. The mediating effect is 9.82%. Finally, some pedagogical suggestions are advanced for the teaching of English writing in senior high schools. And the limitations and some suggestions to the future studies are discussed.

Keywords: English writing achievements, mediating effect, prefabricated chunks, senior high school English learners, writing anxiety

1. Introduction

This part embodies the background information of writing anxiety and prefabricated chunks, the purpose and significance of the study, theoretical foundations, related studies on the relationship among prefabricated chunks, writing anxiety and English writing achievements and research questions.

1.1 Background of the Research

According to The English Curriculum Standard For Senior High schools (2017 edition, revised in 2022), writing is one of the five language skills which is a part of the English course content, the foundation for the development of students' core qualities. But in daily English teaching and learning, writing is difficult and tough for students themselves to improve and for teachers to find effective ways to teach, and it is also more demanding than the other language skills such as reading, because as a productive skill, writing requires not only knowing the meaning of the words and grammatical structures, but also being capable of using them appropriately.

Nowadays for most senior high school English learners, even if some of them have a large vocabulary, most of the words are receptive ones and the number of words they can flexibly use in writing is still limited. Besides, sentences they formed based on the grammar they have acquired are sometimes rigid and incompatible with the native ways of expression.

Thus, the term prefabricated chunks proposed by Becker and Bolinger blazes a new trail for the problems in English writing. Just as Zeng (2021) mentioned in his study that if students have learned prefabricated chunks in advance, when writing, they can quickly retrieve what they need to match their expression. And the more prefabricated chunks they store, the more complex sentences are and the better quality their compositions may have (Zeng, 2021). Therefore, prefabricated chunks can be seen as an effective method to cope with the current problems in English writing.

What's more, with the purpose of solving various problems in English writing, an increasing number of articles in core journals also center on the factors that influence English writing, such as emotions (Cheng, 2004). According to the research from Zhou and Wang (2022), it is found that the studies on writing emotions abroad especially since 2019 have soared to a great extent, which can be viewed as a hot topic. Besides, as one of the sub-terms of English writing emotions, writing anxiety has also been studied to delve into the reasons for its occurrence, its impact on some other important factors in English writing and learning, and how to deal with this negative affection (Zhou & Wang, 2022).

Although there are a large number of researches on the relationship between prefabricated chunks and writing anxiety, prefabricated chunks and English writing achievements, writing anxiety and English writing achievements, the study on the relationship among prefabricated chunks, writing anxiety and English writing achievements and on the mediating role writing anxiety plays in the relationship between prefabricated chunks and English writing achievements is still lacking.

1.2 Purpose and Significance of the Study

The purpose of this research is to explore the current situation of the use of prefabricated chunks, writing anxiety and English writing achievements of the students from Grade 1 of a senior high school in one of the cities in China and to discover the relationship among prefabricated chunks, writing anxiety and English writing achievements. Furthermore, the study is also going to explore the mediating role writing anxiety plays in the relationship between prefabricated chunks and English writing achievements.

Theoretically, based on the affective filter hypothesis and prefabricated chunks theory, this study can bridge the research gap in the relationship among prefabricated chunks, writing anxiety and English writing achievements and provide another theoretical basis for the revolution of the teaching of English writing in senior high schools.

Practically, the research can help English teachers understand the current situation of senior high English learners' use of prefabricated chunks, writing anxiety and writing achievements, how prefabricated chunks influence learners' writing anxiety and English writing achievements and how writing anxiety affects writing achievements. Accordingly, teachers can adjust their teaching plans on what kind of prefabricated chunks and how difficult chunks should be taught so as to mitigate students' anxiety and improve their English writing achievements. And they can also pay more attention to students' emotions on English writing so as to adjust the frequency of writing examination, the way students write a composition and the way teachers evaluate students' works, finally improving students' writing achievements.

1.3 Theoretical Foundations

1.3.1 Prefabricated Chunks Theory

Speaking of the prefabricated chunks theory, the definition and the classification of it will be discussed in detail.

It was Miller (1956) who first brought forth the term chunks and defined it as a relatively large information unit produced after the process of the single information. Then Becker (1975) and Bolinger (1976) proposed the term prefabricated chunks. In recent years, with the rapid development in some new areas, such as cognitive linguistics, Wray A (2002) redefined the prefabricated chunks as a series of prefabricated coherent or non-coherent words or other units stored in the memory as a whole.

Besides, the classifications of prefabricated chunks from Nattinger and DeCarrico, and Lewis are two widely accepted types nowadays. Nattinger and DeCarrico (1992) divided it into four types including poly-words, such as get up; phrasal constraints, such as as ... as...; institutionalized expressions, such as what's up?; sentence builders, such as it occurs to sb. that. Lewis (1993) classified it into four categories --- words and poly-words, such as to and fro; collocations or word partnerships, such as weak tea; fixed expressions which include social greetings such as happy new year, politeness phrases such as I'll have to be going, phrasebook language such as can you tell me the way please, and idioms such as you're making a mountain out of a molehill, and semi-fixed expressions such as could you pass... please?

1.3.2 Affective Filter Hypothesis

American linguist Krashen proposed The Affective Filter Hypothesis in 1980s after drawing on the relevant achievements in psychology and sociology and combining the learners' emotional factors with second language acquisition. From his point of view, although the learners can gain a large number of comprehensible inputs, they cannot assimilate them all, which means not all the comprehensible inputs can be converted into effective outputs. The reason is that emotional factors like barriers function as a filter in the process of language acquisition, only through which foreign language inputs can be acquired. If the learner's feeling is positive or he is motivated, of high confidence and low anxiety and open to the input, his filter will be clean. Then language passes easily through it, which can facilitate language inputs to turn into the inner language capacity. While if the learner's feeling is negative or he is less motivated, of low confidence and high anxiety and close to the input, his filter will be clogged. Little gets through, which may prevent the transference of language inputs. This theory triggers us that in teaching English as a foreign language teachers should also pay close heed to students' emotional states which may greatly affect students' language learning results.

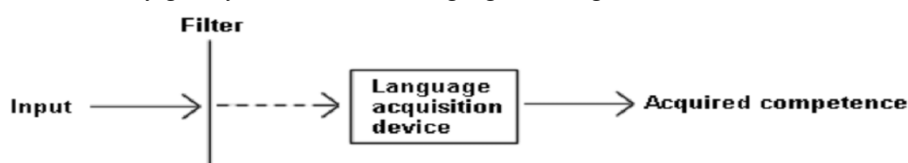


Figure 1. The Model of Affective Filter Hypothesis

1.4 Literature Review

Prefabricated chunks, writing anxiety and English writing achievements are all hot topics in the research of English writing. Because the topic of this research is centered on the relationship among these three variables, the related literature will be reviewed based on the relationship between every two of these three factors.

The first part is the related studies about the relationship between prefabricated chunks and writing anxiety. Liu (2022) mentioned writing anxiety as a prevailing psychological state for nearly most students in senior high schools came from teachers' inefficient teaching strategies and students' inability of constructing and expressing, thus the prefabricated chunks which can improve their capacity of expressing helped them break the barriers in writing finally mitigating their writing anxiety. What's more, because prefabricated chunks were taught or learned in advance, when writing, students can quickly retrieve what they needed to fit their expression. Therefore, the more they stored, the more complex sentences were, the better quality their compositions may have, thus higher writing anxiety will not be engendered (Zeng, 2021). Hu (2015) also proposed that according to Hayes writing process model, the writing process was influenced by many factors such as emotions, recognition, work and long-term memory and etc. Because language was the basis for students to finish the writing tasks, the difficulties in language were the major factor that caused writing anxiety. In Chinese EFL class, what students and teachers focus on are the words and grammar, rather than how to use the language in a more native way. In this way, students cannot express what they desire fluently and accurately. Therefore, remembering some prefabricated chunks can help improve their ability in writing so as to relieve the anxiety.

The second part is the related studies about the relationship between prefabricated chunks and English writing achievements. Inferring from the studies mentioned in the first part, gaining more prefabricated chunks can help students improve their writing ability, thus may improving their English writing achievements. From the teaching experiment and the analysis of the number of prefabricated chunks students used in pretest and post-test, Cui and Ma (2013) found that paying much attention to prefabricated chunks under the guidance of teachers, students' writing scores in experimental class were improved. Likewise, using the nearly similar method, Zhang (2009) also found with the teaching of prefabricated chunks writing scores and the number of the prefabricated chunks students in experimental class used were largely increased. So did the outcomes from Zhang (2015). What's more, different from the above studies, the one made by Wang (2011) only studied the correlation between the number of prefabricated chunks students used in one writing test and their scores, without the control experiment, but found the similar results.

The last part is the related studies about the relationship between writing anxiety and English writing achievements. The studies focused on the relationship between writing anxiety and English writing achievements can be classified into two types according the model they use. For the first type, only the correlation between writing anxiety and English writing achievements is explored. Li and Liu (2013) conducted a study among 294 college freshmen who did not major in English and found that when they entered the university, the level of their

writing anxiety was high and was negatively correlated with their English writing achievements. Li (2015) found in his longitudinal study that students' writing anxiety at the very beginning of the semester had a clearly negative effect on their writing achievements at the end of the semester, which revealed that writing anxiety was a major factor influencing the writing achievements. Li et al. (2022) chose a few students to have an interview about the current situation of their writing anxiety finally also finding that writing anxiety was negatively correlated with writing performance. For the second type, these two elements --- writing anxiety and writing achievements --- were involved in a mediating model with another factor. Guo (2018) constructed a mediating model and found that first, writing anxiety was negatively correlated with English writing achievements, writing self-concept and self-efficacy were positively correlated with English writing achievements, and second, writing self-concept and self-efficacy had an indirect positive effect on writing performance through writing anxiety which played a mediating role. Liu (2022) used two questionnaires and an interview with some volunteers to collect data and found that the sense of high writing anxiety prevailed among high school students, writing anxiety was correlated with writing achievements and it played a mediating role on the relationship between their use of writing anxiety self-regulation strategies and English writing proficiency, with the effect ratio of 31.31%.

In conclusion, most researches explored the correlations between every two of these three variables---prefabricated chunks, writing anxiety and writing achievements, especially writing anxiety and English writing achievements. Although recently some researches of mediating effects have emerged, most of which only include writing anxiety and English writing achievements, few have involved these three variables together in one research. And few researches focused on the mediating role writing anxiety plays between prefabricated chunks and English writing achievements. Therefore, the present research aims to further study the relationship among prefabricated chunks, writing anxiety and English writing achievements and explore the mediating role of writing anxiety between prefabricated chunks and English writing achievements.

1.5 Research Questions

The main purpose of this research is to present the current situation of senior high school English learners' use of prefabricated chunks, writing anxiety and writing achievements, to further elaborate the relationship among prefabricated chunks, writing anxiety and English writing achievements, and finally to dwell on the mediating role writing anxiety plays between prefabricated chunks and English writing achievements. Therefore, the three questions of this research are listed below:

- (1) What is the current situation of senior high English learners' prefabricated chunks, writing anxiety and writing achievements?
- (2) What are the correlations among senior high English learners' prefabricated chunks, writing anxiety and writing achievements?
- (3) Does writing anxiety play a mediating role between prefabricated chunks and English writing achievements? If so, to what extent?

2. Method

This part expounds research participants, research instruments and the detailed procedures of the research.

2.1 Research Participants

The participants of this research are 174 Grade 1 students with nearly similar English competence from a senior high school of Baotou, one of the cities in China. The reason why students in Grade 1 were chosen is because after nearly one-year study in senior high school, students in Grade 1 have already gotten familiar with the English learning and examinations on this stage. Besides, compared with Grade 1 students, those in Grade 2 are approaching the first review before college entrance examination, they may be of more anxiety due to the external pressure, not to mention the students in Grade 3.

2.2 Research Instruments

One questionnaire and one test were served as the instruments to collect data. The questionnaire was used to get an in-depth comprehension of the current situation of senior high school English learners' writing anxiety and the test was arranged to collect the number of prefabricated chunks students used in their compositions and their English writing achievements. Below are the details.

2.2.1 Questionnaire

The writing anxiety questionnaire was adopted and revised from the questionnaire designed by Cheng (2004) and the Chinese version of it revised by Guo and Qin (2010). The questionnaire by Cheng (2004) based on 421

English majors in Taiwan province has 22 items, with the reliability of 0.91. Due to the different participants, the questionnaire by Guo and Qin, whose participants were students in the mainland of China, experienced some revisions, ending up with 20 items in their Chinese version of English writing anxiety questionnaire, still with high reliability.

Because of the different participants involved in this research, some revisions were made. Item 19 was modified to when I write English compositions, I usually feel nervous, because the original expression --- when I write English compositions, I usually feel my whole-body rigid and tense --- was a bit of an exaggeration for English writing only. Item 8 and item 2 were deleted for the feelings they mentioned were the concrete manifestation of panic in item 13. Item 5 and item 12 were deleted because they were repeated with item 10. Item 21 was deleted because the content of it was repeated with item 9 just with different expressions. Item 18 and item 22 were deleted because they were less pertinent to English writing anxiety. Then according to the current situation of senior high school students' English writing, 5 items which were related to the anxiety about the language knowledge and two other items about the idea anxiety were added. Furthermore, all question items are in the form of Likert 6-level Scale, with the option of "totally inconsistent" with a score of 1, the option of "inconsistent" with a score of 2, the option of "basically inconsistent" with a score of 3, the option of "basically consistent" with a score of 4, the option of "consistent" with a score of 5 and the option of "totally consistent" with the score of 6. The reason why the questions in this questionnaire use the Likert 6-level Scale is that according to what Griffiths (2018) mentioned in his study, the option "not sure" in Likert 5-level Scale is not useful, while 6-level Scale can easily avoid this question.

Then because the dimensions of the items in the questionnaire are not distinct, the exploratory factor analysis was conducted. According to the results of exploratory factor analysis and the content of the items, four dimensions are divided as follows.

Table 1. The Dimensions of English Writing Anxiety Questionnaire

| Scale | Dimensions | Items |
|---------------------------------------|----------------------------|----------------|
| English Writing Anxiety Questionnaire | Language Anxiety | 14.15.16.17.18 |
| | Idea Anxiety | 6.7.8.19.20 |
| | Classroom Learning Anxiety | 1.2.3.4.5 |
| | Confidence Anxiety | 9.10.11.12.13 |

2.2.2 Test

The test was arranged to test the number of prefabricated chunks students used in their compositions and their English writing achievements. This test was conducted in March, 2023. Examination paper was carefully designed by professional senior high school English teachers and the topic of the writing was also selected in earnest. After the test, all the writing compositions were marked according to the new criteria in college entrance examination by experienced teachers.

2.3 Research Procedures

The research procedures roughly incorporate three parts: preparation part, data collection part and data analysis part.

In the first part, preparation, after reading enough related studies about the relationship among prefabricated chunks, writing anxiety and English writing achievements, the writing anxiety questionnaire was revised based on the features of participants involved in this research, according to the English writing anxiety scale by Cheng (2004) and the Chinese version from Guo and Qin (2010). Then 39 participants were chosen to take a pilot study. After collecting the data, the questionnaire was analyzed through SPSS 27.0 to test its reliability and validity. The results are as follows.

Table 2. Reliability of EWAQ

| Questionnaire | Number of items | Reliability (Cronbach Alpha) |
|---------------|-----------------|------------------------------|
| EWAQ | 20 | 0.898 |

Note. EWAQ = English Writing Anxiety Questionnaire.

According to the table above, the reliability of this questionnaire is 0.898, above 0.8, which means that its reliability is acceptable and it can be used as an instrument to collect the data about students' English writing anxiety.

Next, the validity was also analyzed by SPSS 27.0. The results are shown below.

Table 3. Validity of EWAQ

| Statistics of KMO and Bartlett's Test | | |
|---|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | | 0.737 |
| | Approx. Chi-square | 673.796 |
| Bartlett's Test of Sphericity | df | 190 |
| | Sig. | <0.001 |

Note. EWAQ = English Writing Anxiety Questionnaire.

From the table, the KMO value of English writing anxiety questionnaire is 0.737, above 0.6, which is acceptable and the P value is below 0.05. Both the two data mean that the validity of this questionnaire is acceptable and it can be used as an instrument to collect the data about students' English writing anxiety.

The second part is to collect the data. 200 Grade 1 students in a senior high school in Baotou city, Inner Mongolia were chosen to take the English writing anxiety questionnaire online on one weekend. Then after the monthly examination in March, students' English writing achievements and their test papers were collected with the help of teachers. After collecting and checking the questionnaires and writing compositions carefully, 174 valid questionnaires were reserved. The effective rate was 87%.

The last part is the most pivotal one during which the collected data were analyzed by SPSS 27.0 and AMOS 26.0. First, the students' English writing anxiety scores were calculated according to the corresponding scores. And the number of prefabricated chunks students used in their compositions was also calculated carefully based on the classification of Nattinger and DeCarrico (1992). Then SPSS 27.0 was used to do the descriptive analysis of the number of the prefabricated chunks students used, students' English writing anxiety and their English writing achievements. Next, SPSS 27.0 was used to test the correlations between prefabricated chunks and writing anxiety, between prefabricated chunks and English writing achievements, between writing anxiety and English writing achievements. Finally, all data were analyzed by AMOS 26.0 to test whether writing anxiety plays a mediating role in the relationship between prefabricated chunks and English writing achievements.

3. Results and Discussion

This part elucidates the results of the research. The first part is the current situation of prefabricated chunks, writing anxiety and English writing achievements. The second part shows the correlation between prefabricated chunks and writing anxiety, prefabricated chunks and English writing achievements, writing anxiety and English writing achievements. Finally, the mediating role writing anxiety plays between prefabricated chunks and English writing achievements is discussed.

3.1 Current Situation of Senior High English Learners' Prefabricated Chunks, Writing Anxiety and Writing Achievements

This part responds to the first research question --- the current situation of prefabricated chunks, writing anxiety and English writing achievements, which was analyzed from its maximum value, minimum value, mean value and standard deviation. The details are as follows.

Table 4. Descriptive Analysis of Prefabricated Chunks, Writing Anxiety and English Writing Achievements

| Variables | N | Min | Max | M | SD |
|------------------------------|-----|-------|-------|-------|------|
| Writing Anxiety | 174 | 1.25 | 5.55 | 3.22 | 0.81 |
| English Writing Achievements | 174 | 21.00 | 38.00 | 29.83 | 3.66 |
| Prefabricated Chunks | 174 | 1.00 | 17.00 | 8.59 | 3.01 |

From the table, the mean value of writing anxiety is 3.22 and its standard deviation is 0.81, which means that students' degree of writing anxiety is concentrated at a relatively high level. Because for Chinese students who learn English as a second language, there are not many opportunities for them who are often taught in traditional classes to immerse themselves in the target language environment where they can get enough original inputs, and due to the huge size of the class the chances for them to write English compositions and for their compositions to be carefully corrected by their teachers are rare, it is difficult or even terrifying for them to complete a composition on their own when there are few accumulations. Besides, for students in China, especially those in senior high schools, English is one of the compulsory subjects in the college entrance examination, so, to be

admitted to their dream universities, English achievements play a pivotal role, which invisibly increases their anxiety about English. Therefore, most of the students' degree of English writing anxiety is high.

Then, about writing achievements, the mean value is 29.83 out of 40 and the standard deviation is 3.66, which shows that these students' English writing scores are at the middle level, and evenly distributed, just as the data presented in the use of prefabricated chunks whose mean value is 8.59 and the standard deviation is 3.01. For Chinese students as the second language learners, the most effective and useful ways for them to improve their writings and to make their writings more native-like is to recite some frequently used words, phrases or sentence frameworks with the purpose of retrieving them directly when writing in the time-limited examination. What's more, because writing is a productive skill, difficult for students to master and plays a large part in examination in EFL context in China, teachers always spend much more time in guiding students how to write and what structures or phrases to use, students' writing achievements are at a middle level. But because most students follow the same framework when writing, there is not much of a gap in their writing achievements.

3.2 Correlations among Prefabricated Chunks, Writing Anxiety and English Writing Achievements

This part answers the second research question --- the correlations among prefabricated chunks, writing anxiety and English writing achievements. The detailed data are as follows.

3.2.1 Correlations between Prefabricated Chunks and Writing Anxiety

Prefabricated chunks which were stored in students' minds in advance and can be directly and effortlessly retrieved can to some extent mitigate students' anxiety when writing, because they have some knowledge about how to write or what words or structures to use. To give telling support to the hypothesis, the data analyzed through SPSS 27.0 are listed below.

Table 5. Correlation between Writing Anxiety and Prefabricated Chunks

| | | Writing Anxiety | Prefabricated Chunks |
|----------------------|---------------------|-----------------|----------------------|
| Writing Anxiety | Pearson Correlation | 1.000 | -0.575** |
| | Sig. (2-tailed) | | <0.001 |
| | N | 174 | 174 |
| Prefabricated Chunks | Pearson Correlation | -0.575** | 1.000 |
| | Sig. (2-tailed) | <0.001 | |
| | N | 174 | 174 |

From the table above, writing anxiety is negatively correlated with prefabricated chunks ($r=-0.575^{**}$, $p<0.001$). There is a significant correlation between writing anxiety and prefabricated chunks. In details, it means that the more prefabricated chunks senior high English learners master, the less anxious they are when writing English compositions.

3.2.2 Correlations between Prefabricated Chunks and English Writing Achievements

Prefabricated chunks are a series of words, phrases or sentence structures which help students' compositions become more native-like and fluent and then gain better scores. To testify the relationship between prefabricated chunks and writing achievements, the detailed statistics are as follows.

Table 6. Correlation between English Writing Achievements and Prefabricated Chunks

| | | Writing Achievements | Prefabricated Chunks |
|----------------------|---------------------|----------------------|----------------------|
| Writing Achievements | Pearson Correlation | 1.000 | 0.875** |
| | Sig. (2-tailed) | | <0.001 |
| | N | 174 | 174 |
| Prefabricated Chunks | Pearson Correlation | 0.875** | 1.000 |
| | Sig. (2-tailed) | <0.001 | |
| | N | 174 | 174 |

From the table above, writing achievements is positively correlated with prefabricated chunks ($r=0.875^{**}$, $p<0.001$). There is a significant correlation between English writing achievements and prefabricated chunks. In

details, it means that the more prefabricated chunks senior high English learners use in their writings, the higher scores they may gain. And it can be seen that these chunks may be viewed as the extra point column to students' writings.

3.2.3 Correlations between Writing Anxiety and English Writing Achievements

Anxiety according to the affective filter hypothesis determines whether the filter between learners and language acquisition is clogged or not and then influences the effect and the scores students gain when learning English. Then the results of the relationship between writing anxiety and writing achievements are presented here.

Table 7. Correlation between English Writing Achievements and Writing Anxiety

| | | Writing Anxiety | Writing Achievements |
|----------------------|---------------------|-----------------|----------------------|
| Writing Anxiety | Pearson Correlation | 1.000 | -0.603** |
| | Sig. (2-tailed) | | <0.001 |
| | N | 174 | 174 |
| Writing Achievements | Pearson Correlation | -0.603** | 1.000 |
| | Sig. (2-tailed) | <0.001 | |
| | N | 174 | 174 |

From the table above, writing anxiety is negatively correlated with writing achievements ($r = -0.603^{**}$, $p < 0.001$). There is a significant correlation between writing anxiety and prefabricated chunks. To be specific, it means that the less anxious senior high English learners are toward English writing, the higher scores they may obtain in their English writings.

The results of this part show that writing anxiety, writing achievements and prefabricated chunks are correlated with each other significantly.

3.3 Mediating Effects of Writing Anxiety between Prefabricated Chunks and English Writing Achievements

This part is the answer of the third research question raised at the very beginning --- the mediating role writing anxiety plays between prefabricated chunks and English writing achievements. The final data are listed below.

3.3.1 Model Hypotheses

This research contains three variables --- the independent variable is prefabricated chunks; the mediating variable is English writing anxiety and the dependent variable is English writing achievements. The following equations are to describe the hypothetical relationships:

(1) Indirect effect = $a*b$

(2) Total effect = $a*b + c$

(3) Ratio = indirect effect / total effect

Based on the above hypothetical equations, the model is erected as follows by using AMOS 26.0.

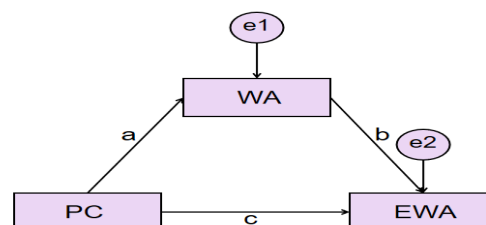


Figure 2. Model Hypothesis

Note. PC = Prefabricated Chunks; WA = Writing Anxiety; EWA = English Writing Achievements.

3.3.2 Path Analysis of the Structural Model

This part conducts the path analysis to show whether there are casual relationships among prefabricated chunks, writing anxiety and English writing achievements. The statistics are listed below.

Table 8. The Path Analysis of the Structural Model

| Label | | | | Estimate (standardized) | S.E. | C.R. | P |
|-------|-----|------|----|----------------------------|-------|--------|-----|
| a | WA | <--- | PC | -0.575 | 0.017 | -9.248 | *** |
| b | EWA | <--- | WA | -0.150 | 0.198 | -3.429 | *** |
| c | EWA | <--- | PC | 0.788 | 0.053 | 18.076 | *** |

Note. PC = Prefabricated Chunks; WA = Writing Anxiety; EWA = English Writing Achievements.

(1) The standardized estimate of coefficient-a between writing anxiety and prefabricated chunks is -0.575, and the P value is 0.000 below 0.001, which means that writing anxiety is negatively correlated with prefabricated chunks, consistent with the hypothesis. If students have more prefabricated chunks, they may feel much more confident and less anxious when being asked to write an English composition either in a restraint time or without time limit.

(2) The standardized estimate of coefficient-b between English writing achievements and writing anxiety is -0.150, and the P value is 0.000, which reflects that there is a negative correlation between writing anxiety and English writing achievements. If students are more anxious about English writing, they may not be able to gain higher scores in English writing.

(3) The standardized estimate of coefficient-c between English writing achievements and prefabricated chunks is 0.788 and the P value is 0.000, which represents the significant positive correlation between English writing achievements and prefabricated chunks. The more prefabricated chunks students possess and use in their writings, the higher scores they will gain.

The detailed relationship among these three variables is presented above, and then the analysis of the mediating role of writing anxiety will be discussed in the next part.

3.3.3 Analysis of Mediating Effect

In this part the data are analyzed by AMOS 26.0 to find the mediating effects among prefabricated chunks, writing anxiety and English writing achievements, based on bootstrapping according to the study of Preacher and Hayes. The 95% confidence interval is chosen in this study with 5000 resampling. It is writing anxiety that plays a mediating role in the relationship between prefabricated chunks and English writing achievements. The results of the mediating effect are as follows.

Table 9. Analysis of Mediating Effect

| Parameter | Estimate | SE | Bias-corrected 95% CI | | Percentile 95% CI | |
|-----------|----------|-------|-----------------------|-------|-------------------|-------|
| | | | Lower | Upper | Lower | Upper |
| PC→WA→EWA | 0.086 | 0.030 | 0.033 | 0.148 | 0.031 | 0.146 |

Note. PC = Prefabricated Chunks; WA = Writing Anxiety; EWA = English Writing Achievements.

According to the data, writing anxiety plays a mediating role in the relationship between prefabricated chunks and English writing achievements. The estimate of the indirect path prefabricated chunks → writing anxiety → English writing achievements is 0.086. The Bias-corrected 95% Confidence Interval is (0.033, 0.148) and the Percentile 95% Confidence Interval is (0.031, 0.146). Because the confidence interval range does not contain 0, there is a significant correlation between prefabricated chunks and English writing achievements. Furthermore, the mediating effect of writing anxiety between prefabricated chunks and English writing achievements is 9.82%. Therefore, writing anxiety plays a mediating role in the relationship between prefabricated chunks and English writing achievements.

4. Conclusion

This part first summarizes the major findings based on the data in the previous part. Secondly, the pedagogical implications for English writing teaching and learning in senior high schools are presented according to the results of the study and some theories. Finally, the limitations of this study and the suggestions for the future research are given to help improve the English writing teaching in senior high schools.

4.1 Major Findings

The major findings of this research are developed from these three aspects.

Firstly, senior high English learners' writing anxiety is at a relatively high level and their English writing achievements and prefabricated chunks used in their writings are at a middle level.

Secondly, there is a negative correlation between writing anxiety and English writing achievements ($r=-0.603$) and between writing anxiety and prefabricated chunks ($r=-0.575$). Besides, English writing achievements and prefabricated chunks are positively correlated with each other ($r=0.875$).

Finally, the upper and lower limits of bootstrap 95% confidence interval do not contain 0, illustrating that writing anxiety plays a mediating role between prefabricated chunks and English writing achievements.

4.2 Pedagogical Implications for English Writing Teaching in Senior High Schools

Among these three variables in this research, prefabricated chunks influence both writing anxiety and English writing achievements and writing anxiety also influences English writing achievements. Then the pedagogical implications are discussed centered on the prefabricated chunks and writing anxiety.

First, prefabricated chunks are negatively correlated with writing anxiety and positively correlated with English writing achievements. Therefore, to relieve senior high English learners' writing anxiety and to improve their English writing scores, teachers should consciously select some useful prefabricated chunks in their textbooks and guide students to accumulate more when doing extensive reading. To help students easily retrieve and use the chunks in their writings, teachers should spend more time checking whether students know how and in what circumstances the chunks should be used.

Second, because there is a negative correlation between writing anxiety and English writing achievements and writing anxiety even plays a mediating role between prefabricated chunks and English writing achievements, teachers should adjust their teaching ways with the reference to the following examples to create a stress-free environment for students to write. When teachers feel most students are at a high level of anxiety, they can reduce the frequency of writing examination, or ask students to write a composition in groups or peers. Without too many writings to be revised, students may feel less strained. As for peer or group work, during which all the participants involved contribute to the theme and the framework, the pressure on individuals will be lessened. What's more, teachers can also adjust their standards to evaluate students' compositions so as to improve students' confidence. If students gain relatively high marks, they may obtain the motivations to write another piece next time. Furthermore, teachers can also select the topics or genres students are much more familiar with when most students are anxious about writing. In this way, because they know how to write and what to write about this topic, the degree of their anxiety will be lowered.

4.3 Limitations of the Study and Suggestions for the Future Research

This research mainly discusses the relationship among prefabricated chunks, writing anxiety and English writing achievements. However, due to the duration of the research time and the limited resources, there are still some limitations which need to be improved.

First, the number of subjects involved in this study is limited. This study only includes 174 students in Grade 1 which are not enough to study the current situation of senior high English learners. Thus, future researches should include more subjects ranging in different stages, such as students from different grades in senior high schools, so as to better reflect the actual situation of what it studies.

Second, this study only involves quantitative research, which is not comprehensive to present the entire situation of senior high English learners' writing degrees, so the qualitative research needs to be added, such as interview, to enhance the reliability and validity of the study.

Third, as for the questionnaire to test the degree of senior high English learners' writing anxiety, due to the differences in subjects, some items were deleted while some were added according to the features of senior high English learners. Although after the pilot study, the reliability and validity are acceptable, to gain more scientific and reliable results, the questionnaire still needs to be polished and improved.

Fourth, in this study, only three major variables are involved. But for writing anxiety, it has various potential sub-terms, which also needs to be explored in detail. And for prefabricated chunks, it also has four types which may have varying degrees of influence on writing anxiety and English writing achievements. If the future study can take all these variables into consideration, the study may become more comprehensive and conducive.

All in all, hope future studies can avoid these limitations and gain more constructive achievements in this field.

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References

- Becker, J. (1975). *The Phrasal Lexicon*. Cambridge Mass: Bolt and Newman.
<https://doi.org/10.3115/980190.980212>
- Bolinger, D. (1976). *Aspects of Language (2nd edition)*. New York: Harcourt BraceJovanovich.
- Bolinger, D. (1976). Meaning and memory. *Forum Linguisticum*, (1), 1-14.
- Cheng, Y. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, (4), 313-335. <https://doi.org/10.1016/j.jslw.2004.07.001>
- Cui, Yanning., & Ma, Junfang. (2013). The correlation study of prefabricated chunks teaching and English writing achievements of higher vocational college students. *Journal of Jincheng Institute of Technology*, (06), 39-42.
- Griffitts, C. (2018). *The strategy factor in successful language learning*. London: Multilingual Matters.
<https://doi.org/10.21832/GRIFFI9740>
- Guo, Jidong. (2018). Effect of EFL writing self-concept and self-efficacy on writing performance: mediating role of writing anxiety. *Foreign Language Research*, (02), 69-74.
<https://doi.org/10.16263/j.cnki.23-1071/h.2018.02.011>
- Guo, Yan., & Qin, Xiaoqing. (2010). Foreign language writing anxiety test of non-English major college students in China and its implications for writing teaching. *Foreign Language World*, (02), 54-62+82.
- Hu, Jing. (2015). An analysis of the relieving effect of prefabricated chunks on second language writing anxiety. *Journal of Chizhou University*, (04), 98-102. <https://doi.org/10.13420/j.cnki.jczu.2015.04.021>
- Lewis, M. (1993). *The Lexical Approach*. Hove: Language Teaching Publications.
- Li, Hang. (2015). The quasi-causal relationship between English writing anxiety and writing achievements in college students: Evidence from a follow-up study. *Foreign Language World*, (03), 68-75.
- Li, Hang., & Liu, Rude. (2013). The relationship between foreign language writing anxiety and writing self-efficacy of college students and its prediction on writing achievements. *Foreign Languages Research*, (02), 48-54+112. <https://doi.org/10.13978/j.cnki.wyyj.2013.02.016>
- Li, Hui., Cui, Xiuzhen., & Hu, Rong. (2022). An analysis of the correlation between writing anxiety and writing achievement of English major graduate students and their coping strategies. *Overseas English*, (08), 82-83+86.
- Liu, Lishan. (2022). Relief of English writing anxiety and improvement of English writing ability under prefabricated chunks strategy. *Overseas English*, (09), 88-89.
- Liu, Qian. (2022). *A study on the effects of senior high school students' English writing anxiety and their use of writing anxiety self-regulation strategies on English writing proficiency* (Master's thesis, Yunnan Normal University, Kunming, China). Retrieved from <https://kns.cnki.net/reader/review?invoice=XebbHAlcEni8V6ZcyTDkzABNMVj365TOZqBw5ZsJh3J6cFqf3GZ7LVaNEtQB9a0cieD2%2FZEtXleZSq%2F9NLSWIH8f5IC6sp%2BzFt4eNyrbGYB1NLufE9Ib6AUZxDgHR1trt5G6WH4K8z9kdAWwmXH0aoIT9sbOG7Ilg0iOooQTO2M%3D&platform=NZKPT&product=CMFD&filename=1022689349.nh&tablename=cmfd202301&type=DISSERTATION&scope=trial&cflag=overlay&dflag=&pages=&language=chs&trial=&nonce=1352DC4D50A74225AE9BDEE65FE060CA>
- Miller, G. A. (1956). The Magical Number Seven, Plus or Minus Two: Some Limits on our Capacity for Processing Information. *Psychological Review*, 63, 81-97. <https://doi.org/10.1037/h0043158>
- Nattinger, J. R., & DeCarrico, J. S. (1992). *Lexical Phrases and Language Teaching*. Oxford: Oxford University Press.
- Wang, Yingpeng. (2011). *A study on formulaic language and EFL writing efficiency performance*(Master's thesis, Jilin University, Changchun, China). Retrieved from <https://kns.cnki.net/reader/review?invoice=dVmZktuJ%2FZ5xTMHy0E5R1z6%2BpucbR4OtrQDOXsU3O NYEpW8UbZtzxEei%2Bwqs8%2FuWV5tzKpLqk7G5Eftv0JjWRTLXVPH9m%2FJ%2Fd2PylkmfZqhbQs>

1Uhl2dXi4S3l0HtB9iZwUXDNnZTI1064xi%2FQpyFStEuXEo8dFliCgiEVzREKc%3D&platform=NZKPT&product=CMFD&filename=1011095678.nh&tablename=cmfd2011&type=DISSERTATION&scope=trial&cflag=overlay&dflag=&pages=&language=chs&trial=&nonce=EF1BF9C9A9984E2D9A8EE54142454EB7

Wray, A. (2002). *Formulaic Language and the Lexicon*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511519772>

Zeng, Shuoshuo. (2021). A study of IELTS writing anxiety relief strategies based on prefabricated chunks theory. *English on Campus*, (27), 238-240.

Zhang, Rongquan. (2009). *The effect of prefabricated chunks on the writing achievement of secondary vocational school students* (Master's thesis, Shandong Normal University, Jinan, China). Retrieved from <https://kns.cnki.net/reader/review?invoice=VKkyt1ugjtBG%2BUIHhyG7ms1EMdKmSfD4W0%2Bf%2BkXOujQUn7UsZvF7CMtxhZCsVs9eCmHy21y7b145Z4WuZrFWib5UU6VZiHSSZS0X8VecuwUT8nCVdH4OeGTuBHzKsa4NJ%2FC2vCnuC7qPUs0We9r2JkwzKaVg28mrJsUdbrsH3VY%3D&platform=NZKPT&product=CMFD&filename=2010030229.nh&tablename=cmfd2010&type=DISSERTATION&scope=trial&cflag=overlay&dflag=&pages=&language=chs&trial=&nonce=DFA7BA700AF345E48C387A26E01A1323>

Zhang, Ying. (2015). *An empirical study on the relationship between prefabricated chunks and English writing in senior high school* (Master's thesis, Soochow University, Suzhou, China). Retrieved from <https://kns.cnki.net/reader/review?invoice=FW3w%2B6fdQq%2BV%2FgbUCXmNTvy8jS59fzQmWVlxwUYgKS2Um3tvq%2FbeuFH%2BA28lpvSs61mvEk%2F4qs%2BsaBNDvfiOxHMkwf3UYzF4cRQIGfCe a7Pmz1YkahtrPyRvz4we6mpOSYFX96hKz%2Fu6J%2BMt8i0cuxs04E1wpThobg8SZBd4E%3D&platform=NZKPT&product=CMFD&filename=1016031756.nh&tablename=cmfd201601&type=DISSERTATION&scope=trial&cflag=overlay&dflag=&pages=&language=chs&trial=&nonce=949A1C5588184C00B7850BDFC377C662>

Zhou, Jie., & Wang, Junju. (2022). Tracking the frontiers of international research on L2 writing emotion. *Technology Enhanced Foreign Language Education*, (06), 65-73+111.

Appendix A

English Writing Anxiety Questionnaire For Senior High School Students

Dear students,

Hello! First of all, thank you for participating in this survey. The purpose of this questionnaire is to understand the situation of high school students' English writing. All the information and data are only used for academic research, and have nothing to do with performance assessment and other things. There is no right or wrong choice, and we promise to keep all the survey information strictly confidential. Please read each question carefully and answer it with confidence according to your actual situation, thank you very much for your cooperation! Please note:

(1) Only one option can be selected for each question

(2) Every question needs to be answered

| Items | English Anxiety Questionnaire | Writing | totally inconsistent | inconsistent | basically inconsistent | basically consistent | consistent | totally consistent |
|-------|--|---------|----------------------|--------------|------------------------|----------------------|------------|--------------------|
| 1 | While writing English compositions, I feel worried and uneasy if I know they will be evaluated. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 2 | I am afraid of my English composition being chosen as a sample for discussion in class. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 3 | I often feel panic when I write English compositions under time constraint. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 4 | I am afraid that other students would deride my English composition if they read it. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 5 | I usually feel very nervous when I write English compositions. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 6 | My thoughts become jumbled when I write English compositions under time constraint. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | My mind often goes blank when I start to work on an English composition. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 8 | When I am asked to write a time-limited English composition without preparation, my brain stops working. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 9 | I usually do my best to avoid writing English compositions. | | 1 | 2 | 3 | 4 | 5 | 6 |
| 10 | I often write what I think and feel in English, such as diary, weekly journal and so on. | | 1 | 2 | 3 | 4 | 5 | 6 |

| | | | | | | | |
|----|--|---|---|---|---|---|---|
| 11 | If my English composition is to be evaluated, I would worry about getting a very poor grade. | 1 | 2 | 3 | 4 | 5 | 6 |
| 12 | I do not worry at all about what other people would think of my English compositions. | 1 | 2 | 3 | 4 | 5 | 6 |
| 13 | I do not worry that my English compositions are a lot worse than others'. | 1 | 2 | 3 | 4 | 5 | 6 |
| 14 | While writing in English, I often worry that my vocabulary is not enough to meet the writing requirements. | 1 | 2 | 3 | 4 | 5 | 6 |
| 15 | While writing in English, I often worry that I would use expressions and sentence patterns improperly. | 1 | 2 | 3 | 4 | 5 | 6 |
| 16 | I often worry about spelling mistakes in my writing compositions. | 1 | 2 | 3 | 4 | 5 | 6 |
| 17 | While writing English compositions, I am afraid that I would make grammatical mistakes. | 1 | 2 | 3 | 4 | 5 | 6 |
| 18 | While writing in English, I often worry that the ways I express and organize my ideas do not conform to the norm of English writing. | 1 | 2 | 3 | 4 | 5 | 6 |
| 19 | When faced with a writing task with an unfamiliar style, I feel overwhelmed. | 1 | 2 | 3 | 4 | 5 | 6 |
| 20 | When faced with a writing assignment that lacks background knowledge about the subject, my mind goes blank because of nervousness. | 1 | 2 | 3 | 4 | 5 | 6 |

Appendix B

Requirements of the English Writing

Part IV Writing (Two sections, full score: 40)

Section 1 (full score: 15)

My friend Tom is in low spirits because of a disagreement with his parents about joining the football team. Please write him a reply. The contents include:

- (1) Give understanding;
- (2) Give advice.

Note: (1) The number of words is about 80; (2) Appropriate details can be added to make the writing coherent.

Section 2 (full score: 25)

Read the following material and write two more paragraphs based on the content and the words at the beginning of the given paragraph to make a complete passage.

The number of continued words should be about 150.

“Want to go to the pool tomorrow?” Rosa asked Stephanie during break time. The pool at the YMCA was one of their favorite places, where they learned and practiced swimming. Rosa and Stephanie did everything together. They rode the school bus together. They sat together during lunch. They took dance lessons together and they even went to the same summer camp. Their classmates called them “twins”. They were best friends. Most of the time. Sometimes, though, when Stephanie was with other friends, she ignored Rosa or treated her like a little kid, even though they were the same age. Rosa and Stephanie had played together since they were babies, but sometimes Stephanie didn't act like a friend. Today was one of those times. “Sorry. I’m already going to the pool,” Stephanie said. “Toni and Vanessa and I are going.” She gave a broad smile, but in Rosa’s eyes, it wasn’t her nice smile. Saying nothing more, she walked straight away to join Toni and Vanessa, and Rosa was left standing alone, with her face burned and feeling angry. After school, at dance class, Stephanie talked and giggled with the other dancers as they stretched in front of the mirror. When Rosa came in, Stephanie didn’t say hello to her. Rosa hesitated for a while about whether she should join them, but she still felt too sad. Then she noticed Kiara, the new girl. Rosa joined her and began stretching, too. Kiara smiled and Rosa smiled back. The two girls began to talk. Rosa discovered that Kiara was not the quiet girl she had thought she was. Kiara talked a lot — about her little brother, about the tree house her uncle had built and even about swimming. “I love swimming,” Kiara said. “I will hold a pool part at the YMCA. Would you like to come?” “Yes. It’s awesome.” Rosa responded. She tried not to check the mirror to see if Stephanie had noticed. She hoped Stephanie felt left out.

Note: 1. The number of the words should be about 150; 2. Please answer the questions in the following format.

After the dance class, when Rosa boarded the bus, Stephanie was waiting in their _____

When Rosa saw Stephanie in low spirits, her heart sank.

Appendix C

Samples of the Students' English Compositions

After the dance class, when Rosa boarded the bus, Stephanie was waiting in their usual seat. However, Rosa seemed ~~to~~ not to see Stephanie sitting there. ~~At~~ At the moment, Stephanie felt left out by Rosa. All the way, Stephanie stared ^{at} Rosa and Kiara who were talking happily and smiling. Stephanie was so unhappy that she was almost in tears. ~~After~~ When she ^{came} ~~was~~ back ~~to~~ home, she even didn't say a word with her parents and eat, instead of thinking all the stupid things that she'd done and crying all night. The next day, Stephanie had lunch alone with her bloated face of ~~is~~ crying.

When Rosa saw ~~Stephan~~ Stephanie in low spirits, her heart sank. Walking to Stephanie and sitting next to her, she explained that she did the wrong thing that she were not supposed to let her alone but Stephanie took no notice of her and neglected her feelings. After saying these words, Stephanie apologized to Rosa and ~~per~~ promised that she wouldn't ~~do~~ that again. The two girls became the best friends again.

Dear Tom,

I'm sorry to hear that ~~have~~ you have trouble with your parents because of ^{joining} taking part in the football team. I believe that you have your own ideas about ~~the~~ this thing, but ^{arguing} argue with parents and being sad ~~is~~ are not so good. Here are some useful tips that can help you to deal with the relationship between you.

First of all, you need to talk to each other about this patiently. What you do this way can only deal with the problem correctly. Next, you're supposed to tell why you want to join the team honestly and patiently. I think that playing football is a good way to exercise and your parents won't stop you from doing the right thing ~~and~~ and will support you. What's more, you should say sorry to your parents because they are elders. Finally, you should make your parents understand you.

Wish you to have a happy end about this thing.

Your sincerely,
Li Hua.

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