Length Approach on English Majors' Writing Anxiety and Writing Performance under Pigai.org

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Abstract: With the help of Pigai.org, based on "Length Approach", this present study is to explore the changes of writing anxiety and writing performance between experimental class and control class before and after the experiment, so as to confirm the influence of "Length Approach" on the first-year English majors in writing teaching. After nearly three months' writing training experiment, the following conclusions are drawn: (1) the "Length Approach" can effectively relieve the writing anxiety of first-year English majors, and it is mainly realized by reducing the cognitive anxiety in writing anxiety; (2) the "Length Approach" can also improve the writing performance of first-year English majors to a certain extent. (3) Pigai.org is an appropriate choice and effective platform for English majors to practice English writing and receive feedback. This study provides some enlightenment for the application of "Length Approach" and Pigai.org in English major's writing teaching.

Keywords: Length Approach; Writing Anxiety; Writing Performance; English Major; Pigai.org

1. Introduction

In college English teaching, the cultivation of English writing skills has always played an important role. With the continuous emergence of teaching methods in English writing, "Length Approach" was first put forward by Professor Wang Chuming from Guangdong University of Foreign Language [1]. The approach stimulates students' true feelings and writing impulses by designing writing tasks. In the process of implementation, "Length Approach" complies with the rule of foreign language learning and increases the contents of writing by adjusting the length of the composition gradually. It also prompts students to break the limit of English learning. In addition, "Length Approach" also takes into account the affective factors of learners. Students may not feel nervous by gradually increasing the word number of writing, and thus their sense of achievement can be improved and their confidence can be developed. Nowadays, more and more scholars pay attention to "Length Approach" and apply it in English writing teaching.

Pigai.org is an online service system for automatic correction of English compositions, which has been widely used in colleges and universities. Pigai.org provides students with the overall comments of sentence structure, language expression, and specific feedback information to modify the composition. Since pigai.org scoring criteria are in line with the scoring criteria of "Length Approach" and can also meet the four scoring criteria recommended by Professor Wang Chuming, namely, the length of students' composition, composition structure, composition content and language expression, the use of pigai.org is beneficial to the better implementation of the "Length Approach".

Chinese students often have negative and painful feelings when they are faced with writing tasks. They are often hindered in the process of writing and inhibit the ability to write. This kind of emotion expressed in the writing process is called writing anxiety. Some scholars have realized that writing process is a complex psychological process. And writing process is influenced by emotional factors. At the same time, some scholars have found that the writing anxiety is a significant factor affecting the emotional state of learners. Many students often have a certain degree of anxiety and pressure in the face of English writing tasks, which is not conducive to the improvement of English writing performance. Therefore, more and more scholars begin to research the anxiety of English writing and also investigate the effect of writing anxiety on writing performance.

On the basis of previous researches, this research continues to focus on English writing anxiety. However, the difference lies in the exploration about the influence of the application of "Length Approach" on writing anxiety and writing performance of the first-year English majors with the help of Pigai.org.

2. Literature Review

The problem of second language writing anxiety has attracted the attention of many scholars. S. D. Krashen (1985) proposed the input hypothesis and the emotional filtering hypothesis, which has aroused widespread concern in the foreign language teaching community, and has a major impact on the practice of foreign language teaching in China [2]. Yuh-show Cheng (2008) investigated the relationship between second language classroom anxiety and second language writing anxiety. The results indicate that second language classroom anxiety and second language writing anxiety are two related but independent constructs [3]. Y.-S. Cheng (2004) developed and evaluated the self-reported L2 writing anxiety measure in accordance with the three-dimensional conceptualization of anxiety, which ultimately constitutes the second language writing anxiety scale (SLWAI) [4].

At home, the "Length Approach" as a new and localized teaching method is also receiving more and more attention. Tang Jijuan (2017) pointed out that students gradually overcome the fear of English writing, enhance the confidence of English writing and thus improve the English writing performance after one semester of the "Length Approach" training [5]. Zhen Yangyang's action research showed that "Length Approach" effectively improves the students' writing performance. And students are more confident in their English study [6]. Guo Yan (2011) comprehensively examined the impact of "Length Approach" on the non-English major undergraduates in English writing anxiety and writing ability in her paper [7]. Guo Yan & Qin Xiaoqing (2010) pointed out that foreign language writing anxiety consisting of classroom teaching anxiety, ideation anxiety, avoidance behavior and self-confidence anxiety, is common among college students; the avoidance behavior reaches high anxiety level; the subjects of high and low anxiety level have significant differences in writing performance; writing anxiety is negatively correlated with writing performance[8]. Wang Fujin & Song Shunsheng (2009) showed that the students who used the "Length Approach" had significantly improved their English writing level. And they found that the average sentence length of the post-test is higher than the average sentence length in the previous test in the experimental class [9].

From the above, more and more scholars are paying attention to the problem of the practical effect of "Length Approach" on writing anxiety and writing performance. Some scholars have studied the influence of the "Length Approach" on English writing ability. Some scholars have studied the enlightenment of "Length Approach" on writing teaching. On the basis of previous studies, this study not only further explores the impact of "Length Approach" on writing anxiety of first-year English majors, but also discusses the specific causes of the influence of "Length Approach" on writing anxiety.

3. Methods

3.1 Research Questions

This study aims to explore the English writing anxiety level of first-year English majors and further investigate and analyze the impact of "Length Approach" on writing anxiety. Secondly, it aims to further investigate and analyze the impact of the use of the "Length Approach" on writing performance of the first-year English majors. Therefore, this research puts forward the following two questions that need to be solved.

(1) Can "Length Approach" effectively alleviate first-year English majors' writing anxiety?

(2) Can "Length Approach" effectively improve first-year English majors' writing performance?

3.2 Research Subject

The subjects of this study were 73 students from two parallel class of first-year English major. The reasons for employing the first-year English major as the subjects are as follows. Firstly, the first-year

English majors have a certain writing foundation. Secondly, the first year of the English major has not yet opened a special writing course, so the students more or less lack language output practice in English learning of this stage. Thirdly, combined with the features of the implementation of "Length Approach", the writing level of sophomores, juniors and seniors has exceeded its applicable level. On the whole, first-year English majors are more stable and operative as subjects.

Taking into account the reliability of the study, two classes were randomly selected as experimental and control class. Students in two parallel classes have similar levels of English learning. The experimental class uses the "Length Approach" for writing training, while the control class uses traditional teaching methods for writing training.

3.3 Research Instruments

3.3.1 Writing Tests

This study conducted a three-month writing tests to explore whether the writing anxiety of first-year English majors can be alleviated after the use of "Length Approach". During the three months, the author arranged a writing test every two weeks on the pigai.org, for a total of five times. The first one and the fifth one were taken as pre-test writing and post-test writing respectively. The topics of writing tests are selected from the topics of "post-writing practice section" of the Integrated English Course that the subjects are studying.

3.3.2 Questionnaire of Writing Anxiety

To collect data on the writing anxiety of the subjects, this research employs the questionnaire compiled by Y.-S. Cheng (2004)—Second Language Writing Anxiety Inventory (SLWAI). The 22 statements of SLWAI are in the form of Likert's five-point scale. Each statement is followed by five choices (strongly disagree, disagree, neither agree nor disagree, agree, strongly agree). The statements of 1, 4,7,17,18,21,22 are all negative, so the scores of the seven statements need to be reversed in the calculation. The SLWAI contains three dimensions: Somatic Anxiety (Statements 19,15,13,11,8,6,2), Cognitive Anxiety (Statements 21,20,17,14,9,7,3,1), and Avoidance Behavior (22,18,16,12,10,5,4). The results show that the scale has good internal consistency and test-retest reliability, aggregation validity, discriminant validity and criterion validity. The score of the anxiety scale ranges from 22 to 110. A high score represents a high level of anxiety; on the contrary, a low one means a low level.

3.4 Research Procedures

Three stages are contained in this study, namely the pre-experimental stage, the experimental stage and the post-experimental stage. The pre-experimental stage contains the writing test for the experimental and control classes and the writing anxiety questionnaire distribution before the application of the "Length Approach". The survey of anxiety levels aims to clarify the original state of psychological anxiety in the two classes. Next, the author asked the subject of the two classes to write an English composition on the pigai.org within a week with the same topic.

Table 1: Specific requirement of the writing test

Stage	Weeks	Writing Topics	Word Requirements
Pre-experimental stage	9th	What is your opinion about future schools?	CC: 120~180 EC: 120~180
Experimental stage	11th	What is your idea of a man of good manners?	CC: 120~180 EC: 100~150
	13th	Please write a composition about friendship	CC: 120~180 EC: 150~200
	15th	What is the most interesting place you would like to take your foreign friend to see and why?	CC: 120~180 EC: 200~250
Post-experimental stage	17th	What is your opinion about western holidays and festivals?	CC: 120~180 EC: 120~180

(CC refers to control class; EC refers to experimental class. The same below.)

The experimental stage was carried out with the application of the "Length Approach", which consisted of three writing tests. The writing topics of the control class are the same as those of the

experimental class, while the number of words in the two classes was different. The number of words in control class was required to be 120 to 180 words, while in the experimental class was increased in order, 100~150, 150~200, and 200~250 respectively. The specific requirements of the writing tests were shown in Table 1 below. The corrections of the composition were completed on the pigai.org. According to the concept of the "Length Approach", the author gave an evaluation of students' composition in the backstage of the pigai.org to stimulate the students' writing enthusiasm.

The post-experimental stage was carried out at the end of the application of the "Length Approach", including the writing test, writing anxiety questionnaire and data analysis and discussion. The writing test requirements and writing anxiety questionnaires for the two classes were the same. The author compared the scores of pre-test and post-test, and the results of pre-questionnaire and post-questionnaire by SPSS 24.0 to analyze the effect of the "Length Approach" on the research subjects' anxiety and performance of English writing.

4. Results and Discussion on Writing Anxiety and Writing Performance

4.1 Results and Discussions of Writing Anxiety

Whether the writing anxiety of first-year English majors can be alleviated after using the "Length Approach" is the first question in current study.

(1) Results of Writing Anxiety in Pre-test

From Table 2, the mean scores of writing anxiety in the experimental class and control class are both 74.19, which exceed 70 points, indicating the writing anxiety was high in the two classes. After an independent sample t-test, the data in the Table 2 shows that there is no significant difference in writing anxiety between the two classes (t (71)=-0.004, p>0.05). Therefore, this study can be carried out in the next step.

Table 2: Comparison of writing anxiety in pre-test

	CC (n = 37)		EC (n = 36)		MD	t(71)	P
Writing	M	SD	M	SD			
Anxiety	74.19	7.464	74.19	4.967	-0.005	-0.004	0.997

(2) Results of Writing Anxiety in Post-test

In Table 3, the mean scores of writing anxiety in post-test for the control class and experimental class are 74.16 and 70.72 respectively; the mean difference is 3.44. And it is clear that the score of experimental class is lower than control class. Compared with the scores of pre-test, the post-test mean scores of writing anxiety in the experimental class decreased by 3.47, while the control class only decreased by 0.03. According to the data of the independent sample analysis in Table 3 (t (71) = 2.249, p < 0.05), there is significant difference on the writing anxiety between the experimental class and the control class. This means writing anxiety of the experimental class students has been effectively alleviated after applying the "Length Approach".

Table 3: Comparison of Writing Anxiety in Post-Test

	CC (n = 37)		EC (n = 36)		MD	t(71)	P
Writing	M	SD	M	SD			
Anxiety	74.16	5.689	70.72	7.300	3.44	2.249	.028

In order to further clarify which type of writing anxiety is relieved by the "Length Approach" in experimental class, the research analyzed pre-test and post-test of the three major categories of writing anxiety by paired samples T-test.

In Table 4, those three types of writing anxiety have declined, with cognitive anxiety decreasing the most, from 26.17 to 18.14. As to the Sig. (2-tailed), the values of the three types of writing anxiety in the pre-test and post-test are 0.019, 0.000, 0.011 respectively, which are all below 0.05; a significant change surfaces. This means that "Length Approach" is positive to alleviate all three kinds of writing anxiety, especially cognitive anxiety.

Table 4: Comparison of pre-test and post-test of categories of writing anxiety

Anxiety of EC	TEST	M	SD	MD	t	P
Somatic Anxiety	Pre	24.67	2.995	0.09	.231	.019
	Post	24.58	3.090			
Cognitive Anxiety	Pre	26.17	3.653	8.03	14.835	.000
	Post	18.14	3.619			
Avoidance Behavior	Pre	23.36	3.191	1.55	2. 691	.011
	Post	21.81	3.748			

(3) Discussions of Writing Anxiety Results

From the results of the above statistics, this research finds that the "Length Approach" can effectively alleviate the writing anxiety of first-year English majors. Prior to the experiment, it has been found that there was little difference between the experimental class and the control class in the level of writing anxiety, and the level was high in both classes. After three months of writing training experiment of "Length Approach" , there was a significant difference in writing anxiety in the two classes. The anxiety level in the experimental class was much lower than that in the control class. The reasons for this result are as follows. Firstly, the well-designed writing topics are acceptable and interesting to students. Therefore, students have internal motivation to write and can actively complete writing tasks. Secondly, the way of increasing the length of writing gradually stimulates students' enthusiasm for writing, and makes them feel more and more accomplished, which naturally reduces their writing anxiety. Thirdly, with the help of the pigai.org, students can get timely feedback and further revise their compositions. Most students enjoy the process of writing rather than rushing to complete their writing tasks. In addition, the researcher of this thesis gives evaluation of students' compositions in the backstage of the pigai.org, which protects students' self-esteem to a certain extent.

The specific dimension of writing anxiety involves three aspects: somatic anxiety, cognitive anxiety, and avoidance behavior. From the data in Table 4, we can see that cognitive anxiety declined most significantly, while somatic anxiety and avoidance behavior declined slightly. The reason for this result can be seen in two ways. On the one hand, cognitive anxiety is a student's self-suggestion. For example, item 1 states that "I will not be nervous when I write in English", which will affect students' writing performance. However, the "Length Approach" encourages students to express their true feelings according to their own wishes, so this will reduce their cognitive anxiety. On the other hand, cognitive anxiety includes anxiety about students' attitude towards writing evaluation, such as item 3, "If I know that English writing is corrected by teachers, I will feel nervous and uneasy". Combining with the pigai.org, students are more willing to accept "Length Approach". In this case, their writing anxiety will accordingly reduce.

4.2 Results and Discussions of Writing Performance

Whether the writing performance of first-year English majors can be improved after using the "Length Approach" is the second question in this study.

(1) Results of Writing Performance in Pre-test

As we can see from Table 5, the average scores of writing performance of the experimental class and control class are 81.139 and 80.419 respectively. And there is no significant difference between the two classes (t (71) = 0.770, p = 0.444 > 0.05). Therefore, this study can be carried out in the next step.

Table 5: Comparison of Writing Performance in Pre-Test

	CC (n = 37)		EC (n = 36)		MD	t(71)	P
Writing	M	SD	M	SD			
performance	80.419	4.0148	81.139	3.9706	-0.72	.770	.444

(2) Results of Writing Performance in Post-test

As can be seen from Table 6, the average scores of writing performance of the experimental class and control class are 83.181 and 81.878 respectively. Although there is no significant difference between the two classes (t (71) = 1.514, p = 0.134>0.05), the average writing score of the experimental class increase by 2.042, while the control class only increase by 1.459. This shows that the "Length Approach" has a certain promotion effect on writing performance.

Table 6: Comparison of Writing Performance in Post-Test

	CC (n = 37)		EC (n = 36)		MD	t(71)	P
Writing	M	SD	M	SD			
performance	81.878	3.5579	83.181	3.7875	-1.303	.1.514	.134

(3) Discussions of Writing performance Results

The result shows that the advancement of the writing performance in the experimental class is slightly higher than that in the control class, and there was no significant difference between them. The reasons are as follows.

The characteristics of the writing itself determine that the improvement of writing achievement is a process from quantitative change to qualitative change. The application of any writing method must be tested over time. Only after a long period of training can the writing performance be improved. Because the experimental time of this study is relatively short, the improvement in the experimental class is not obvious. In addition, the control class also carried out a three-month writing exercise, so their writing performance has also made some progress.

To sum up, the "Length Approach" is helpful to improve the writing ability of first-year English majors, and it also requires long-term training. This enlightens us to pay attention to daily writing practice.

5. Conclusion

After nearly three months of writing training experiments, this study mainly draws the following findings through analysis and discussion of experimental data.

First of all, the use of the "Length Approach" has a positive effect on alleviating the subjects' writing anxiety from soma, cognition, and avoidance behavior; and cognitive anxiety decreases significantly. Meanwhile the application of the "Length Approach" can actively mobilize students' writing enthusiasm and interest.

Secondly, the application of the "Length Approach" also helps to improve the writing performance of first-year English majors to a certain extent. On the one hand, the relief of writing anxiety and the accumulation of writing practice can help improve students' writing performance. On the other hand, the improvement of writing is a long-term process from quantitative change to qualitative change. Only when you practice a lot in daily life can your writing performance be significantly improved.

Thirdly, the implementation of the "Length Approach" is also inseparable from the teacher's efforts. The teacher's careful design of the writing task can greatly stimulate students' writing enthusiasm. In addition, in the process of applying the "Length Approach", the teacher also needs to give feedback to students timely to promote students' greater progress in writing.

Fourthly, with the development of society, traditional teaching methods can play a better role with the help of science and technology. The creative combination of pigai.org and the "Length Approach" has realized the two-way evaluation system of "machine correction + teacher feedback". This two-way evaluation model is beneficial to improve students' writing motivation, writing interest and writing performance.

However, there are also some shortcomings and limitations in this study, such as the small number of subjects, the short time of writing training, and other interference factors and so on. Therefore, the effect of the "Length Approach" on writing anxiety and writing performance of English majors could be further studied and explored.

Acknowledgements

References

[1] Wang Chuming. Foreign language "Length Approach". Chinese Foreign Language, 2005, pp. 46-49.

[2] S. D. Krashen, The input hypothesis: current issues in bilingual education: Proceedings of the Georgetown Round Table on Languages and Linguistics. Tesolq Quarterly Cornell U Press, 1985, pp. 765-781.

[3] Y.-S. Cheng. A measure of second language writing anxiety: scale development and preliminary validation. Journal of Second Language Writing, 2004, pp. 313-319.

[4] Y.-S. Cheng, Elaine K. Horwitz, Diane L.S. Challert. Language anxiety: differentiating writing and speaking components. Language Learning, 2008, pp. 417-423.

[5] Tang Jijuan. Empirical study on the application of "Length Approach" in high school English writing teaching—taking Zhengzhou City No.16 Middle School. enan Normal University, 2017.

[6] Zhen Yangyang. Action research of "Length Approach" in High School English Writing Teaching. Shenyang Normal University, 2016.

[7] Guo Yan. Experimental study on the influence of "Length Approach" on non-English major undergraduates' writing anxiety and writing ability. Foreign Language World, 2011, pp. 73-81.

[8] Guo Yan, and Qin Xiaqing. The foreign language writing anxiety testreport and its enlightenment to writing teaching in non-English majors in China. Foreign Language World, 2010, pp. 54-62.

[9] Wang Jinfu, and Shunshen. Experimental study of the classroom task based "Length Approach". Shandong Normal University, 2009, pp. 28-33.