

Research on the Current Situation of College English Majors' Self-efficacy and Its Influence on TEM-4

-- A Case Study of ZYU

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Abstract

Self-efficacy refers to an individual's judgment and belief in their ability to perform a specific behavior. Although self-efficacy has been extensively studied, previous research has mainly focused on non-English major student populations. Therefore, this paper investigates the correlation between self-efficacy and the performance of English majors on the TEM-4. This study employs questionnaire and interviews to investigate the self-efficacy of third-year English majors at Zhejiang Yuexiu University(ZYU). Data are analyzed by using SPSS and Excel. The study found that the overall level of self-efficacy for English learning among English majors was moderately high. Self-efficacy has a significant impact on the performance of English majors on the TEM-4, with a significant correlation between the two. Also, there is a significant difference in self-efficacy between the high and low-score groups, with the former having a significantly stronger self-efficacy. Based on these research findings, the author discusses strategies for improving the self-efficacy of English majors, including appropriate teaching difficulty, differentiated instruction for students of different levels, and encouragement and guidance for students to learn from role models.

Keywords

Self-efficacy, English majors, TEM-4, Correlation research.

1. Introduction

1.1. Background of the Study

Self-efficacy, as proposed by Bandura (1997, p. 158), refers to an individual's ability to judge their capability to accomplish certain tasks. It is used to assess the level of ability and confidence when performing various tasks, and has been applied in various fields, including psychology, education, management and professional sports competitions. Students' self-efficacy in learning is reflected in various subjects ranging from primary school to college, such as math, chemistry and languages. However, in the current exam-oriented educational environment in China, such as the College Entrance Examination, the high-pressure teaching goals and tasks leave teachers with limited opportunities to cultivate and improve students' sense of self-efficacy. As a result, some students who lack interest in English and even have a negative attitude towards it may struggle to keep up with the teaching pace, and may ultimately fail in English learning.

Moreover, In exam-oriented education, the focus is often on knowledge comprehension and academic performance, neglecting students' learning process, methods, and emotional well-being. This intense learning environment can impose psychological burdens on students, leading to a loss of confidence in learning English. Over time, this can result in reduced self-efficacy and even a fear of studying any subjects. Moreover, after the College Entrance

Examination, some students enter the job market without a clear understanding of college majors or career plans. They may choose English as their major based on trends or unreliable online information, only to discover that the actual professional study differs from their expectations, causing confusion and anxiety.

1.2. Significance and Purpose of the Study

Self-efficacy, a multi-dimensional construct, plays a pivotal role in language acquisition and has diverse implications for learning. This study aims to investigate the relationship between self-efficacy and learning outcomes among English majors, thereby advancing our understanding of the impact of self-efficacy on language learning. By exploring the correlation between self-efficacy and academic performance, this research seeks to provide a theoretical foundation for teachers to enhance their teaching practices. Additionally, it aims to clarify the interconnectedness of self-efficacy concepts and further enrich the theory of self-efficacy by examining the relationship between English majors' self-efficacy and their performance on the TEM-4 examination. This study holds significant theoretical value and contributes to the field of language learning.

This study has practical implications for English majors, highlighting the importance of self-efficacy and emotional factors in their language learning process. By actively developing self-efficacy, students can cultivate confidence and resilience to overcome challenges and setbacks. This approach is particularly beneficial for students facing learning difficulties, as it enhances learning efficiency and test scores by focusing on areas for improvement.

For teachers, it is crucial to go beyond focusing on subject knowledge and prioritize nurturing students' self-efficacy during grade examinations in college English teaching. Recognizing the influence of emotional and psychological factors in English learning is essential, and integrating self-efficacy research can encourage both students and teachers to understand their significance. This study provides insights into the current state of English majors' self-efficacy, promoting deeper understanding of emotional factors in their learning process.

In terms of teaching methods, English teachers should not assume that all English majors possess high self-efficacy in English learning. Acknowledging the importance of emotional factors, such as self-efficacy, alongside academic performance is crucial. Teachers should adjust their teaching plans and classroom activities accordingly, providing opportunities for students to express themselves publicly. Creating specific scenarios that allow students to cultivate and enhance their self-efficacy in the English environment is vital. Additionally, teachers can foster students' development of a growth mindset, emphasizing the role of effort in success and motivating them to achieve their goals through hard work.

1.3. Structure of the Thesis

This study investigates the current situation of English learning self-efficacy of three classes of English majors in grade three of ZYU, and analyzes the correlation between the three dimensions of self-efficacy of English majors, including the sense of ability to accomplish tasks, the sense of frustration in English learning, and the sense of confidence to reach goals, with the scores of TEM-4. This thesis consists of five chapters.

The first chapter is the introduction, which mainly introduces the research background, and expounds the purpose, significance and overall framework of the research.

The second chapter is literature review. Firstly, it discusses the definition of related concepts of English learning self-efficacy. After that, the research of domestic and foreign scholars is sorted out and analyzed, and the areas which can be further investigated are pointed out. Finally, the theoretical basis of this study is listed and integrated.

The third chapter is the research design. Based on the preset research questions, the paper selects the appropriate survey objects, research tools and research methods. After collecting

and sorting out the data, the statistical correlation analysis is carried out and the conclusion is drawn.

The fourth chapter is data discussion and analysis. Two analyzing tools Excel and SPSS are mainly used in this study, to analyze the current situation of self-efficacy of English majors. Then, Pearson coefficient is used to analyze the relationship between the dimensions of English learning self-efficacy and the scores of TEM-4, and analyzing-differences between high- and low-score groups will be carried out. In addition, an interview is used to further investigate the situations of self-efficacy of students from both groups, and the results are analyzed and discussed.

The fifth chapter includes research conclusion and prospect. At the beginning of this chapter, the research conclusion of this study will be presented. Then from the perspective of both teachers and students, some suggestions will be provided.

2. Literature Review

2.1. Study Abroad

Self-efficacy, initially proposed by Bandura (1997, p. 158), has been extensively studied by foreign scholars, revealing a significant positive correlation between self-efficacy and students' academic performance. Furthermore, research has explored the association between self-efficacy and other learning variables, such as emotion and self-evaluation.

Zimmerman and Martinez-Pons (1990, p. 303-313) found a positive correlation between students' self-efficacy and academic performance. Ormrod (2006) concluded that students with higher self-efficacy exhibit a positive learning attitude. Conversely, lower self-efficacy can lead to psychological barriers and hinder students' progress in English learning activities. Students with fewer negative emotions are more likely to engage in learning.

Ersanl and Yang (2015, p. 472-478) conducted a survey of middle school students and discovered a positive correlation between self-efficacy in English learning and dimensions such as gender, motivation, and achievement. Bandura (1997) compared the self-efficacy of two student groups, revealing significant differences. Subsequent studies indicated that students with higher self-efficacy demonstrate stronger strategic thinking and persist in seeking better solutions when facing difficulties. Komarraju and Nadler (2013, p. 67-72) found that self-efficacy predicts individual metacognitive strategies, with higher self-efficacy students being more adept at employing effective learning strategies and choosing challenging tasks. Conversely, individuals with lower self-efficacy exhibit negativity, self-denial, and avoidance of even simple tasks.

Pintrich and De Groot (1990, p. 33-40) identified factors such as self-regulation ability and cognitive strategies that influence students' learning efficacy. They concluded that a stronger sense of learning efficacy is associated with increased utilization of learning strategies and greater persistence in learning. Self-efficacy enhances learning motivation and facilitates the effective use of learning strategies. Ueki and Takeuchi (2012, p. 1-22) focused on the confidence aspect of self-efficacy and found that individuals with high self-efficacy possess the self-confidence to tackle tasks, believing in their abilities and efforts to overcome challenges and achieve goals.

Pajares (2003, p. 139-158) explored self-efficacy in relation to writing knowledge, demonstrating that individuals with high writing self-efficacy effectively utilize writing knowledge and achieve better writing performance.

2.2. Study at Home

Research on self-efficacy in China aligns with findings from abroad. It explores the correlation between self-efficacy and academic performance, as well as other attributes such as gender and

emotions. For example, Wang (2006) and Liu (2010) found a positive correlation between self-efficacy and academic performance in English learning. Zhang Jing (2011) surveyed senior high school students and found a positive correlation between learning strategies, academic self-efficacy, and academic performance.

Gender differences in self-efficacy have also been studied in China. Lianlan (2015) found that male students tend to have higher self-efficacy in math learning compared to female students, although the correlation varies across specific disciplines and groups. The relationship between emotions and self-efficacy has also been explored. Zhang Risheng and Yuan Limin (2004) investigated the relationship between foreign language anxiety, self-efficacy, and achievement among college students. They concluded that higher anxiety levels are associated with lower self-efficacy in English learning, and negative emotions can impede students' physical and mental well-being and hinder English learning.

Scholars have also investigated methods to improve self-efficacy. For instance, Zhuo Xiaobin (2005) studied the influence of cooperative learning on primary school students' English learning efficacy, highlighting the positive impact of cooperative learning on self-efficacy. Liu Minlan (2009) conducted an experimental study on the effectiveness of using mathematics diaries to improve mathematics learning self-efficacy. The study revealed a significant improvement in students' mathematics learning self-efficacy through diary usage.

3. Research Methodologies

3.1. Objectives of the Research

This study aims to solve the following two questions by collecting data and using statistical methods to analyze data.

- (1) What is the current situation of self-efficacy of undergraduate English majors in China?
- (2) What is the correlation between learning self-efficacy and academic performance of undergraduate English majors in China?

3.2. Subjects of the Research

The subjective of the research are 103 junior students selected from three classes of ZYU. These students all major in English. The reason for choosing these students is that they study in a same major, making their grade be a reliable factor. They all have studied English for three years in university, receiving the same English training plan. Therefore, the data can be more accurate and the conclusion more credible with the reduction of some external influence factors.

3.3. Instruments of the Research

3.3.1. Questionnaire

In this paper, the questionnaire of English learning self-efficacy is adapted "English self-efficacy scale" from Zhang Risheng (2004, p. 58), and scored by Likert's five-point scale method. There are 15 items in total. Five scoring levels are set up, 1=fully agree; 2=agree; 3=Neutral; 4=disagree; 5=fully disagree. The corresponding table is shown in Table 1.

Table 1. Fully-point Likert Correspondence Table

Response	Fully agree	Agree	Neutral	Disagree	Fully disagree
Score	5	4	3	2	1

The dimensions of English learning self-efficacy are carried out from three aspects, including the ability to complete tasks, the confidence to achieve goals, and the frustration of English learning. Among them, the ability of students to complete tasks includes items 1, 4, 7, 10, 13;

the items to investigate students' confidence in achieving goals include questions 3, 6, 9, 12, 15; items which analyze students' frustration in English learning include questions 2, 5, 8, 11 and 14. The title numbers and corresponding titles of three dimensions are respectively shown from Table 2 to Table 4.

Table 2 Correspondence Table of Sense of Competence

Title Number	Title of Questionnaire
1	I fully comprehend high-level English articles discussed in class
4	I think I have the comprehensive ability to learn English well
7	I can use English writing skills well
10	I can find solutions to English study difficulties
13	I can keep pace with English teacher and grasp the class content

Table 3 Correspondence Table of Sense of Frustration

Title Number	Title of Questionnaire
3	I consider quitting when I struggle with English listening materials
6	I worry about making mistakes
9	Exam failure hurts my English learning confidence
12	I feel scared when I do not understand English class
15	Adjusting to an unfamiliar English teacher's style takes time to me

Table 4 Correspondence Table of Sense of Confidence

Title Number	Title of Questionnaire
2	My best effort makes English courses manageable
5	I am confident in learning English well, regardless of my performance
8	My hard work leads to top grades in my class
11	It's not difficult for me to get a high score in English
14	I never doubt my learning ability, regardless of my English score

The reliability coefficient is 0.767, which is obtained by using SPSS to analyze the reliability of the Cronbach's alpha of the questionnaire, indicating that the questionnaire is feasible. The result is shown in Table 5.

Table 5 Reliability Statistics Table

Cronbach's Alpha	N
0.767	15

3.3.2. Interview

For interviews to further investigate the relationship between self-efficacy of English majors and their performance on professional exams. After completing the questionnaire and organizing the data, the author divides them into high-score group and low-score group in accordance with the classification method of Kelly (1939, p. 24), and 14 students, depends on 27% and bottom 27% in their TEM-4 scores, are randomly and respectively selected from two types of groups. The interview outline is adapted from Zhang (2020, p. 14) with 6 questions. During the students' responses, the author was concurrently transcribing notes. The interview questions still focused on three aspects of self-efficacy, including sense of competence, frustration and confidence, to deepen our understanding of the research topic. The interview questions are shown as follows.

- (1) What are the common reasons that lead you to choose to give up learning English?
- (2) Do you believe that you have the ability to learn English well? Why?
- (3) Do you have confidence in completing English learning tasks? Why?
- (4) What do you think are the reasons for your low English grades? (For example: vocabulary, grammar, reading habits, reading speed, etc.)
- (5) Do you persist in learning grammar despite encountering difficulties? What motivates you to persist?
- (6) What are the reasons behind vocabulary retention and deficiency issues?

3.3.3. Report Card

The scores of the students on the Test for English Majors (TEM-4) administered in 2020 were utilized in this study, which out of 100 points, 60 points is the passing grade. Hence, the present investigation aims to compare the levels of English learning self-efficacy with the performance of the students, and to examine the correlation between the level of self-efficacy and the academic performance of the students. The total 103 students' TEM-4 scores are shown in Table 4. X-axis represents students' code and Y-axis represents students' scores.

Table 6. TEM-4 Score Scatter Plot



3.4. Procedures of the Research

3.4.1. Preparation Stage

Before the questionnaire survey, the author deeply understood the specific situation of the third-grade students in ZYU through extensive observation, and interviews with both students and faculty members. The author also analyzed academic records and attendance data to gain a comprehensive understanding of the students' academic progress and challenges. Additionally, the author attended several classes and extracurricular activities to gain first-hand insight into the daily experiences and concerns of the third-grade students.

3.4.2. Implementation and Data Analyzing Stage

Electronic questionnaire was distributed to students in the surveyed class. Then, according to the data collected by the questionnaire. Firstly, Excel and SPSS are used to describe the overall English learning self-efficacy and the maximum, minimum, mean and standard deviation of its three dimensions, so as to investigate the current situation of college English majors' self-efficacy.

In addition, Pearson coefficient in SPSS is used to analyze the relationship between their English learning self-efficacy and the three dimensions and their academic performance. Then, according to the results of the TEM-4 grade, they are divided into high-score group and low-score group, which depends their TEM-4 scores and the difference of English learning self-efficacy between high-score group and low-score group are tested.

In the end, interviews were conducted with students to verify and supplement the results of the questionnaire. The interview time is set in the self-study class after the questionnaire. The interviewees are 28 students from the high-score and low-score groups.

4. Results and Discussion

4.1. Current Self-efficacy Level of English-major Students

After understanding the overall level of college students' self-efficacy, a questionnaire was conducted on the research questions, and statistical analysis through such as median, average and standard deviation were conducted on the problem. The results are shown in Table 7.

Table 7. The Average Statistical Results of English-learning Self-efficacy

	Median	Maximum	Minimum	Average	Standard Deviation
Self-efficacy	37.5	54	21	39.36	6.917
N	104				

According to the content of table 7, it can be found that through general descriptive statistics, in the statistical scale of college students' English self-efficacy, the maximum value is 54, the minimum value is 21, the median is 37.5, and the average value is 39.36. It can be seen that the overall level of college students' English learning self-efficacy is above the middle level. The difference between the highest score and the lowest score is 33 points, indicating a large gap.

For the specific differences in the three dimensions of self-efficacy, students with higher self-efficacy usually have higher sense of ability and confidence. The full score of 50 points in these two dimensions, students' score can reach up to 44 points. And the average score of sense of frustration is 12.75, which is lower than the other two dimensions. It is mainly reflected in the fifth and eighth questions. Students are generally worried that they will make mistakes when they do the questions and feel afraid when they do not understand in English class. For the students with lower scores in the self-efficacy test, their scores of sense of ability, frustration and confidence are generally below the average value. These students tend to have insufficient confidence in English learning and the adaptation time in class will be longer.

Therefore, it can be seen that the English learning self-efficacy of English majors has an important influence on their English learning process. This paper will make a further analysis by comparing the TEM-4 grades and self-efficacy as a whole and its three dimensions.

4.2. Analysis of Questionnaire

The author mainly uses Pearson's correlation coefficient in SPSS to gradually analyze the correlation between different dimensions of English majors' self-efficacy, so as to solve a research question: "Is there a correlation between English learning self-efficacy and English majors' TEM4 scores?" The specific results are shown below.

4.2.1. Whole Correlation

The first analyzing stage of this paper is to verify the relationship between the overall self-efficacy and the performance of the TEM-4 grade. Table 8 presents the overall data on self-efficacy, while the analysis results are shown in Table 9. For Table 8, the X-axis represents the student code, while the Y-axis represents the total self-efficacy score.

Table 8. Overall Level of Self-efficacy

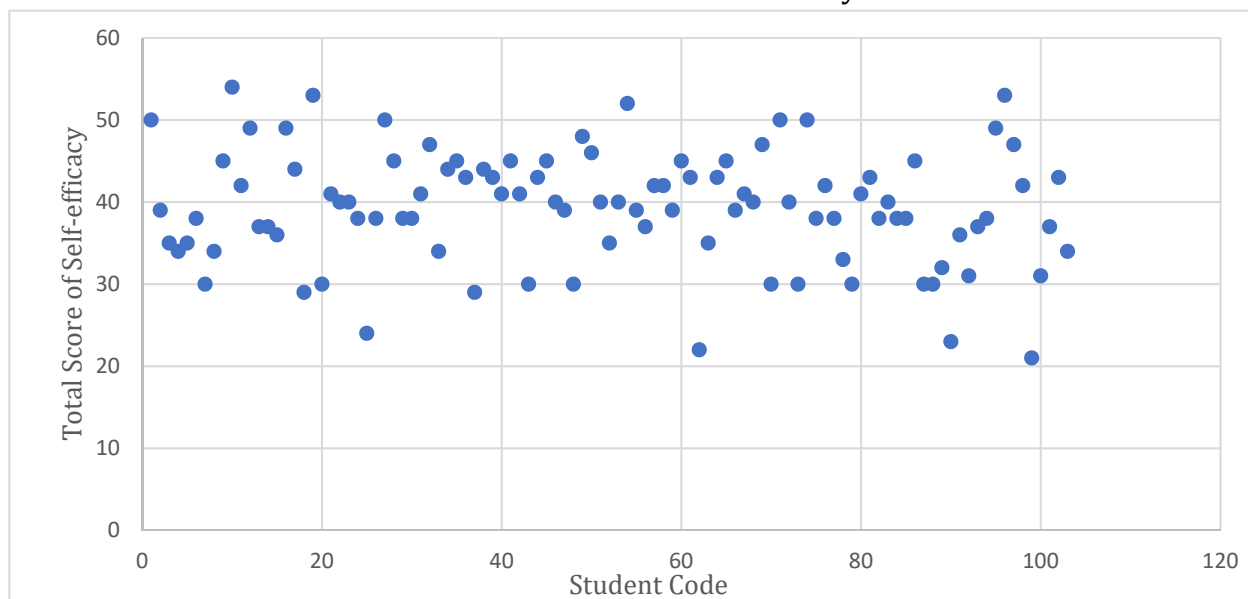


Table 9. Correlation Between Self-efficacy and English Achievement

		Score of TEM-4	Self-efficacy
Score of TEM-4	Pearson Correlation	1	.583**
	Sig. (2-tailed)		.000
	N	103	103
Self-efficacy	Pearson Correlation	.583**	1
	Sig. (2-tailed)	.000	
	N	103	103

** . Significant correlation at 0.01 level (two-tailed).

Based on the data in table 9, it is clear that there is a relationship between English students' performance in the TEM-4 grade and their self-efficacy, with a correlation coefficient of 0.583. Therefore, there is a significant positive correlation between students' self-efficacy and their performance in the TEM-4 at the 0.01 level (two-tailed). When students have this higher self-efficacy, they generally have higher scores in the TEM-4.

Conversely, students with low self-efficacy tend to get lower scores in the exam. This shows that the level of self-efficacy affects the English students' performance in their professional exam, and students with high self-efficacy tend to be less afraid of making mistakes and hold more confidence in learning English. In the following sections, the relationship between sense of competence, frustration, confidence, and TEM-4 performance will be explored respectively.

4.2.2. Correlation Between Sense of Competence and TEM-4 Performance

In this section, the relation between TEM-4 score and sense of competence in self-efficacy is going to be investigated. The data of sense of competence are shown in Table 10 and analyzing results are shown in Table 11. Full score is 25, and X-axis represents student code, while Y-axis represents the score of sense of competence.

Table 10. Data about Sense of Competence

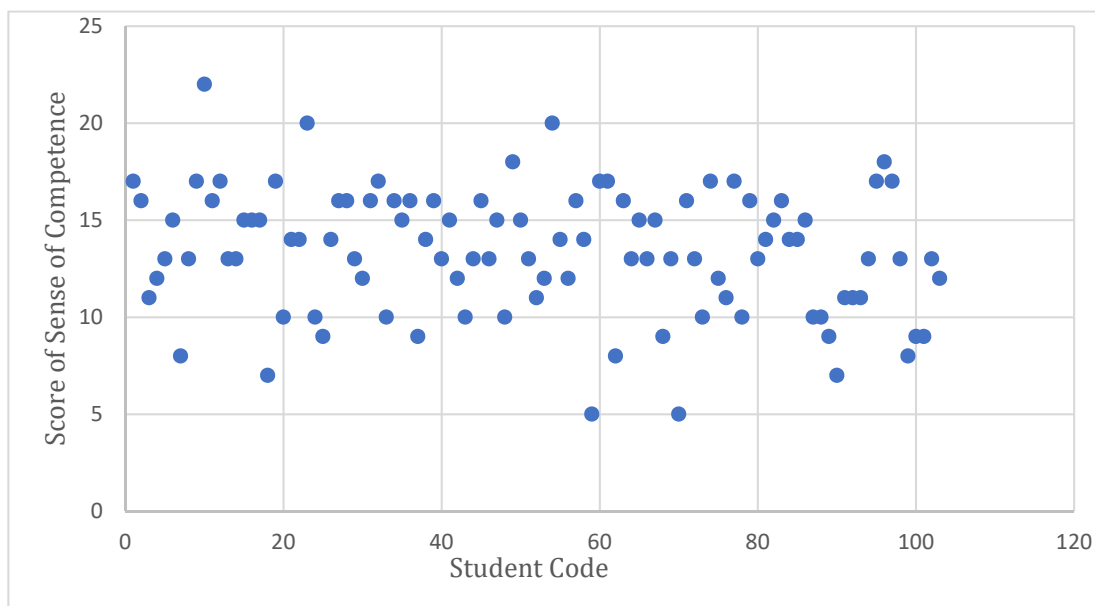


Table 11. Data about Sense of Competence

		Score of TEM-4	Sense of Competence
Score of TEM-4	Pearson Correlation	1	.707**
	Sig. (2-tailed)		.000
	N	103	103
Sense of Competence	Pearson Correlation	.707**	1
	Sig. (2-tailed)	.000	
	N	103	103

** . Significant correlation at 0.01 level (two-tailed).

According to the analysis results in the table 11, the correlation coefficient between students' English scores and their sense of competence is 0.707. It can be seen that students' TEM-4 scores are positively correlated with their sense of competence.

That is to say, the improvement of students' sense of competence has a promoting effect on their performance of TEM-4, while the low sense of competence has no promoting effect on TEM-4. Among the five questions in the sense of competence part of the questionnaire, the 13th item (I can keep up with the speed of English teachers in the classroom and master the relevant knowledge) has a strong correlation with the Pearson correlation coefficient of the English test. The highest correlation coefficient is 0.619, which is greater than 0.6. In addition, the 7th question (I can use English writing skills well) also has a strong correlation with the fourth grade, and the Pearson correlation coefficient is 0.603. These two strong relevant items show that the English majors with high TEM-4 score think that they can be more efficient in the classroom and have a better mastery of knowledge. In TEM-4, they can better use the learned examination skills and achieve better results.

To sum up, when English majors think that they have the ability to master the English knowledge taught by teachers in the classroom, they will love learning English more subjectively, and the learning effect will be relatively more efficient. In the process of examination, they can also use the learned skills more effectively to get better results.

4.2.3. Correlation Between Sense of Frustration and TEM-4 Performance

In this section, the correlation between sense of frustration and English achievement will be analyzed. The data of sense of frustration are shown in table 12 and Table 13 shows the correlation. Full score is 25, and X-axis represent student code while Y-axis represents the score of sense of frustration.

Table 12. Data about Sense of Frustration

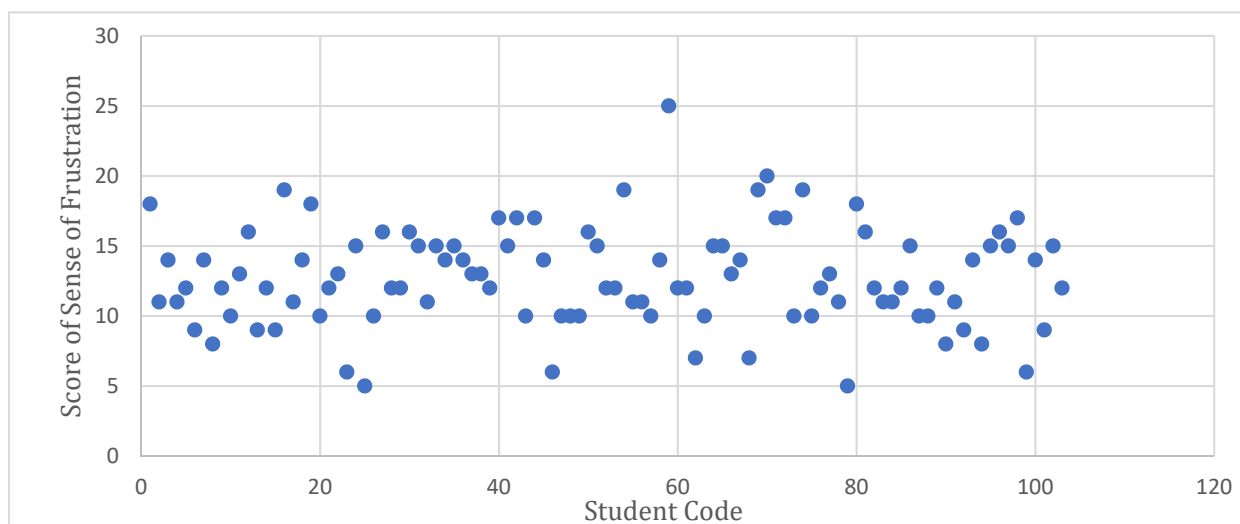


Table 13. Data about Sense of Frustration

		Score of TEM-4	Sense of Frustration
Score of TEM-4	Pearson Correlation	1	.208**
	Sig. (2-tailed)		.035
	N	103	103
Sense of Frustration	Pearson Correlation	.208**	1
	Sig. (2-tailed)	.035	
	N	103	103

** . Significant correlation at 0.01 level (two-tailed).

It can be seen from the table 13 that there is a weak correlation between English majors' academic performance and sense of frustration. According to the analysis results of Table 13, the correlation coefficient between students' frustration and students' TEM-4 scores is 0.208, showing a weak positive correlation.

In other words, students with good TEM-4 scores will have slightly stronger frustration in learning. Among the specific five items, 2nd item (I will give up when I don't understand English listening materials), 5th item (I often worry about making mistakes when doing exercises) and 14th item (If the teacher uses unfamiliar methods in class, I will take a long time to adapt), the Pearson's correlation coefficient of these three questions is between 0.1 and 0.2. As a result, it can be seen that there is a very weak relationship, indicating that the students with high scores in TEM-4 will have slightly higher concerns about their own class and mistakes in the exam than students with low scores. In addition, the correlation coefficient between the 8th item (failing to do well in the English test will hit my confidence in learning English well) and the TEM-4 grade is 0.73, which means students with high score are more likely to lose confidence by academic setbacks.

Combined with the four items analyzed before, although students may doubt themselves in the learning process, and their self-confidence are more easily to be influenced by setbacks, with appropriate sense of frustration, they can still get good performances in TEM-4

4.2.4. Correlation Between Sense of Confidence and TEM-4 Performance

This part is going to analyze the correlation between sense of confidence and English achievement. The data about sense of confidence are shown in Table 14 and its X-axis and Y-axis represents code of students and score of sense of confidence. While data of correlation are shown in Table 15.

Table 14. Data about Sense of Confidence

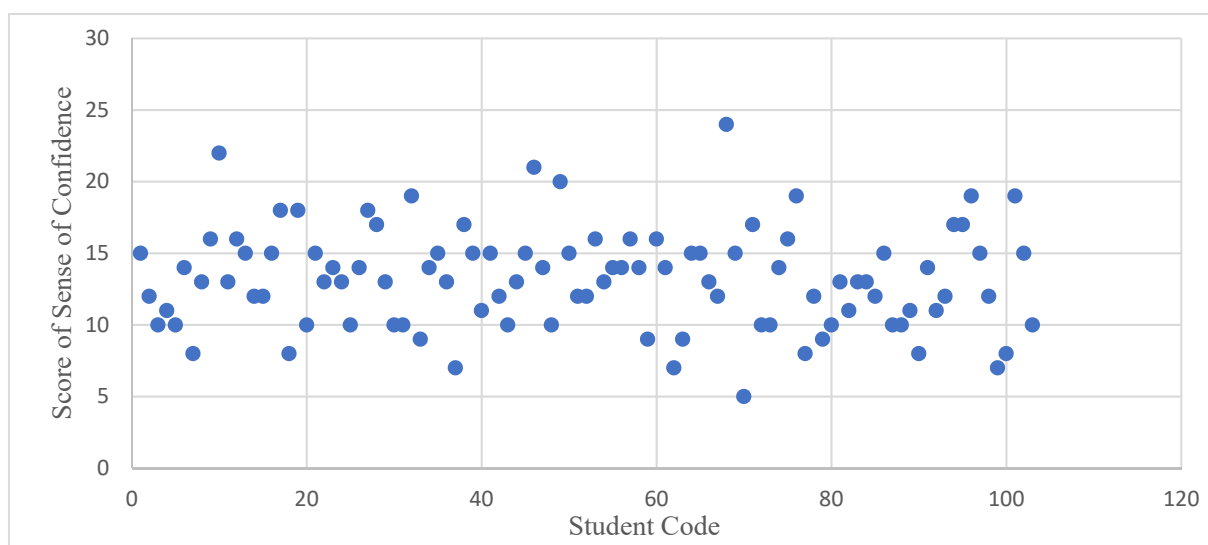


Table 15. Data about Sense of Confidence

		Score of TEM-4	Sense of Confidence
Score of TEM-4	Pearson Correlation	1	.290**
	Sig. (2-tailed)		.000
	N	103	103
Sense of Confidence	Pearson Correlation	.290**	1
	Sig. (2-tailed)	.003	
	N	103	103

** . Significant correlation at 0.01 level (two-tailed).

According to the analysis results of Table 15, students’ level of self-efficacy are positively correlated with their scores in TEM-4, and the correlation coefficient is 0.290. Therefore, students’ self-efficacy and their TEM-4 scores are significantly positively correlated at the 0.01 level (two-tailed).

On the whole, the highest degree of correlation with the students’ scores is the students’ sense of ability so that the students’ scores mainly depend on the students’ learning ability. Students with good grades in the learning process have slightly higher frustrations, but these frustrations do not affect their sense of confidence.

4.3. Overall Self-efficacy Difference Between High-score and Low-score groups

In order to further explore the relationship between the self-efficacy of English majors and the TEM4, the grouping was based on the top 27% and bottom 27% ranks of their TEM-4 scores.

Students with the former being designated as the high-score group, and the latter as the low-score group. 14 students are randomly selected from each of the two groups to explore the differences in the self-efficacy of students with different TEM4 scores. The mean and standard deviation is analyzed by SPSS.

Table 16. Differences Between Groups with High and Low Score

Group	Average	N	Standard Deviation
High-score group	46.28	14	4.399
Low-score Group	34.07	14	7.601
Total	40.17	28	8.71

Through the statistical analysis of the self-efficacy scores of the high-score group and the low-score group, it can be found that the gap of average between two groups is more than 12, which means difference in self-efficacy between the high-score group and the low-score group is obvious. The self-efficacy of the high-score group is higher, and the self-efficacy of the low-score group is lower. Therefore, the university can improve the self-efficacy of the students by improving and intensifying the self-efficacy of the students to promote the TEM-4 results of the English majors.

4.4. Analysis of Interview

In the fourth question "What do you think is the reason why English scores cannot be improved", the answers of high-score students and low-score students are similar. Most of them said "Grammar and vocabulary are my biggest challenges in learning English", indicating that their difficulties in learning English mainly come from vocabulary and grammar. In addition, the importance of grammar and vocabulary in TEM-4 motivates them to overcome these learning difficulties. These results show that English majors face similar challenges and have similar motivations in language learning regardless of their academic level. Also, TEM-4 is an essential intrinsic motivation for them.

To the fifth question "Can you stick the process of grammar learning", high-score students stick to it because of their expectation for future careers, for example, some students said "I want to be a teacher, if I cannot learn grammar well, how can I teach my students, so I must learn grammar well", and some students said "If I want to do foreign trade, grammar and vocabulary is necessary". However, the students in the low-score group have two high-frequency answers: The first one is "If it is too difficult, I will give up" and another is "I have chosen English major and have no other choice but learn". Based on the above answers, it can be found that although the challenges faced by high-score group and low-score group are similar, the two groups of students have different concepts of facing setbacks. High-score group students will contact their own future with current difficulties so that they have more confidence to deal with them. While the low-score group is more likely to give up or follow the trend.

Based on the answers to questions one, two and three, the attitudes of high-score students and low-score students are completely opposite. More than two-thirds of the high-score students think they have the competence and confidence to learn English well and are willing to overcome difficulties. The second question "Do you think you have the ability to learn English well", their answers include "English majors must learn English well", and the third question "Do you think you can complete English learning tasks". Most of the answers are positive answers such as "almost all my courses involve English, so I can certainly complete it". Same situation in the first question. The main reason for the high-score students to give up is their own laziness. Many students' answers are "I am too lazy", but they also add that "I will continue to face difficulties when temporary laziness passes. However, students with lower TEM-4

scores have different views. Although most of them think that they do not have the ability to learn English well, yet some of them are still confident in their ability to learn English well. When they encounter difficulties in learning, they tend to think that learning difficulties are unimportant, and continue to learn easier tasks. This shows that high-score students have stronger task-completion ability and confidence in achieving goals, while low-score students have various opinions in sense of competence and sense of confidence, and are more likely to give up in the face of setbacks.

However, in the sixth question "What do you think are the reasons why you cannot increase your vocabulary", high-score students attribute the vocabulary bottleneck to insufficient learning time, while low-score students attribute it to their own poor ability. It can be seen that high-score students have stronger sense of self-efficacy and confidence, and a more positive attitude towards overcoming difficulties, while low-score students have more negative attitude and are more likely to give up.

To sum up, in this interview, it can be found that both high-score and low-score students face similar difficulties in English learning, especially in vocabulary and grammar. However, high-score students have a stronger sense of self-efficacy and a sense of ability and confidence. In the face of difficult problems, they are more inclined to attribute the reasons to the lack of time. The low-score students are attributed to their own ability. Moreover, the two dimensions of the sense of ability and confidence from the low-score students are quite different and unstable.

5. Conclusion

5.1. Major Findings of the Research

(1) Above-average Self-efficacy of College English Majors

The self-efficacy of English majors is above the average level, with an average of 39.36, exceeding the median of 37.5. But the gap between the highest score and the lowest score is relatively large, which is 33. It can be seen from the research that students with a higher level of self-efficacy will have a higher sense of ability, frustration and confidence, and their professional examination results will be better. For students with low self-efficacy in English learning, their scores in the three dimensions of self-efficacy are relatively low. They generally think that their English learning ability is weak and their confidence in English learning is relatively low.

(2) Positive Correlation Between English Learning Self-efficacy of College English Majors and Their TEM-4 Scores

This paper uses qualitative and quantitative research methods to study. Firstly, the questionnaire is distributed to English majors, and the relationship between self-efficacy and TEM-4 scores is explored through data collation and analysis. After analyzing the experimental results, it is found that there is a positive correlation between students' self-efficacy and English scores. That is to say, the higher the students' self-efficacy is, the better their scores will be. The design of the questionnaire includes three aspects of self-efficacy: sense of competence, frustration and confidence, in order to explore the impact of these three dimensions on students' academic performance. The results show that these three dimensions are positively correlated with the TEM-4 grade. Among them, the correlation between the sense of ability and the TEM-4 grade is above 0.7, and the correlation is strong. It can be seen that the sense of ability will greatly affect the scores of English majors' professional exam. The correlation between the other two dimensions, namely sense of frustration and confidence, and the TEM-4 grade is less than 0.3, and the correlation is weak. Therefore, a slight sense of frustration and confidence can have a positive impact on the results of the TEM-4.

(3) Self-efficacy Gap in English Learning Between High- and Low-Score Students

This part is grouped by the level of the TEM-4 grade, and the students are divided into high-score group and low-score group for research. The results of the survey show that the difference between the self-efficacy of the high-score group and the low-score group is obvious. The self-efficacy of the high-score group is higher, and the self-efficacy of the low-score group is lower. This shows that higher self-efficacy is relevant to the improvement of English performance of English majors. Students with low self-efficacy will lose confidence in their English learning ability and think that their efforts will not yield good results, which leads to their negative attitude in the process of English learning. In contrast, students with high levels of self-efficacy will be more motivated to learn English and continue to make progress. They believe that efforts will cause successful results.

5.2. Research Enlightenment

Through the analysis and research of this article, improving self-efficacy is relevant to promoting English majors to achieve better results in TEM-4. Therefore, in the course design and teaching stage, teachers should take the relevant dimensions of self-efficacy into account, and use corresponding teaching methods to improve students' self-efficacy so that students can have more confidence and motivation to learn English.

5.2.1. Appropriate Difficulty Level

In second language acquisition, Steven Krashen stresses the importance of comprehensible input for language learning. Learners need to understand the language input they receive in order to acquire the language effectively. The theory suggests that the learning materials should be slightly more challenging than the learner's current level, represented as "i + 1".

In this study, the appropriate difficulty level of learning tasks is crucial. If tasks are too simple, students may perceive learning as unchallenging and develop blind confidence. On the other hand, overly difficult tasks can lead to fatigue and a sense of "learned helplessness", resulting in decreased self-efficacy. Finding the right balance of task difficulty is essential to provide students with a sense of achievement and address their learning challenges, gradually improving their abilities. Moreover, an appropriate level of difficulty can also create manageable frustration, preventing overconfidence and ultimately promoting self-efficacy and improved performance in the TEM-4 exam.

5.2.2. Aptitude-based Teaching

The English level of students in a class is different. If all the students are taught in the same way and the same content, it may lead to some students cannot adapt. First of all, teachers should consider and respect the individual differences of students, and adopt "diversified and dynamic" evaluation model according to individual differences, pay attention to the changes of each student, and give encouragement at the appropriate time to improve their self-efficacy. Secondly, teachers should design a variety of teaching activities so that students can actively participate in classroom activities. Among them, the cooperation and exchange between students, competitive choices can help students develop individual advantages and achieve the purpose of improving self-efficacy.

5.2.3. Model-learning Implementation

Bandura (1997, p. 158) suggests that self-efficacy can be enhanced through personal achievements and observing others. For instance, when an individual sees someone at the gym who has a similar physique and is able to lift a heavy dumbbell, they may feel motivated to try the same weight, believing they are capable. This principle applies to learning English as well. If a student observes a peer with similar grades achieving high scores in English, it can boost their confidence and self-efficacy, inspiring them to strive for similar success.

To foster self-efficacy, teachers should help students identify exemplary role models and encourage them to share their learning experiences and strategies. However, when

implementing model learning, two aspects should be emphasized. Firstly, teachers should ensure that the role models are relatable and attainable for students, as overly high standards may not effectively motivate them. Secondly, teachers should assist students in developing appropriate plans to track their progress, allowing them to experience personal growth and enhance their self-efficacy.

5.3. Limitations and Suggestions

Although this study proves that the improvement of English learning self-efficacy can promote the TEM-4, there are still some shortcomings.

First of all, the number of samples is insufficient. This study only selected 103 students from three classes in a university as the research object, so the research conclusion may not apply to English majors in wider range. Therefore, samples should be collected more to obtain better authority.

In addition, this study only conducted a correlation survey, and did not design relevant experimental interventions for dynamic research to give more authoritative conclusions and recommendations.

As a result, in future research, it is recommended to consider more variables such as self-concept, learning motivation, etc. Secondly, dynamic research on self-efficacy can be conducted using diagnostic and formative evaluation methods by comparing pre- and post-results.

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