

Relationships Between Self-efficacy and CET-4 Reading Achievements of Non-English College Students

LV Yumiao

University of Shanghai for Science and Technology, Shanghai, China

Self-efficacy, as an important factor in language learning, can influence an individual's attitude in the face of difficulties. And English reading ability, as an important aspect of measuring college students' language proficiency, has a significant impact on language learning. In this study, 40 non-English major college students participated in this study and correlation analysis was used to investigate the relationship between self-efficacy and College English Test (CET-4) reading achievements of non-English college students. The results showed that students' reading self-efficacy is significantly positively correlated with reading achievements and the correlation was medium high. In addition, this research provides teachers some teaching suggestions to help students enhance their reading self-efficacy and improve their reading abilities.

Keywords: self-efficacy, CET-4, reading achievements, non-English college students

Introduction

Self-efficacy, first introduced by Bandura (1977), refers to people's judgement of their capabilities to organize and execute courses to action required to attain designated types of performance (pp. 191-215). In other words, self-efficacy is the belief we have in our own abilities or a certain task. Self-efficacy, as an important factor in language learning, can influence individuals' attitudes when facing difficulties in the language learning process. With the increasingly significant role of College English Test (CET-4) in assessing students' overall language ability, a growing number of students put more efforts into improving CET-4 achievements. English reading ability is the foundation for English learners to develop other language abilities and plays an important role in English learning. Therefore, the improvement of English reading ability is greatly helpful in improving students' comprehensive English ability and it is an effective way to learn English well. Although there have been many studies on the relationship between self-efficacy and achievement, there are still fewer studies on the correlation between self-efficacy and CET-4 reading achievements. By exploring the relationship between self-efficacy and CET-4 reading achievements of non-English college students, this study can help teachers become more aware of the importance of self-efficacy in their daily teaching activities, so that they can adopt effective teaching strategies to enhance students' reading self-efficacy and develop their ability to cope with difficulties and challenges.

Literature Review

In recent years, research on self-efficacy has mainly focused on the following two aspects: firstly, research on the relationship between self-efficacy and achievement and attitude; secondly, research on self-efficacy and

emotions such as anxiety and depression. There has been a considerable amount of research on the relationship between self-efficacy and achievement, and most of the findings prove that self-efficacy is one of the best predictors of achievement. High self-efficacy promotes the improvement of achievement, while low self-efficacy affects the improvement of achievement (Cole & Hopkins, 1995). Martin et al. (2019) investigated the relationship between self-efficacy and test performance by using structural equation modeling, drawing on the literature related to test effects and the theory of the relationship between motivation and performance. Emotional factors are one of the important factors affecting language learning, and in recent years, they have received much attention. Many researchers have conducted self-efficacy studies while often integrating other psychological states, such as anxiety and burnout. Jin and Dong (2007) found that self-efficacy of college students was significantly positively related to academic performance and negatively related to test anxiety.

In addition, some researchers have also conducted studies on self-efficacy and learners' different language abilities. Li (2017) explored the effect of writing self-efficacy on writing performance through a combination of quantitative and qualitative approaches, confirming that students' writing self-efficacy is an important factor influencing writing performance, and revealing the path of writing self-efficacy's influence on students' writing performance. Wang (2015) explored the relationship between self-efficacy, reading meta-cognitive strategies and English reading achievement among non-English major undergraduate students by using structural equation modeling. The findings showed that self-efficacy not only directly and positively influenced English reading performance, but also indirectly and positively influenced English reading performance through reading meta-cognitive strategies.

The Study and Research Questions

For English learners in China, reading ability is an important part of English learning abilities and the reading part accounts for the most points in many tests. Therefore, reading ability plays an important role in students' English learning and even becomes the key to college students to pass the CET-4. By studying the relationship between self-efficacy and reading achievement in CET-4, this study aims to guide teachers and students to adopt appropriate methods to enhance self-efficacy when conducting reading training and to develop students' ability to cope with difficulties and challenges in reading, so as to better improve students' reading ability. The research questions of this study are as follows:

1. To what extent does college students' self-efficacy correlate with their English reading achievement?
2. How to improve college students' English reading ability by strengthening their self-efficacy?

Methods

Participants

A total of 42 students majoring in different disciplines participated in this study. Forty-two questionnaires were distributed, and 40 valid questionnaires were collected. The language that students mostly spoke at school is Mandarin. All the students are undergraduates of University of Shanghai for Science and Technology (USST).

Materials and Measures

Questionnaires. The questionnaire consists of two sections. The first section is about the participants' background information, such as gender, major, grade level, reading score, and total score. The second section is about the reading self-efficacy questionnaire. The reading self-efficacy questionnaire consists of 16 items and is

be designed to utilize five-point Likert Scale. The total score is 80 and higher scores indicate higher reading self-efficacy.

Reading scores and total scores in CET-4 test. Reading scores and total scores are obtained by students checking the authentic CET-4 report card.

Procedures

College students' background information and reading self-efficacy were collected through online questionnaires. All students participated in questionnaires with their informed consent. In order to ensure that students fully understand the content of the questionnaire, the researcher had explained the questionnaire adequately to the students prior to its completion. And the researcher had made it clear to the students before they participated in this study. In addition, there were clear instructions on the front of the questionnaire, so that students could answer accurately and carefully.

Data Analysis

First, the researcher checked data. The purpose was to check whether each participant had fully completed all items of the questionnaire. Invalid data were excluded. Then, the researcher coded the data. Coding means converting the questionnaire results and reading achievement into numerical form. Finally, the researcher entered data into the computer and this study analyzed data by using SPSS 25.0. The descriptive statistical analysis was first conducted, and then, the correlation analysis between self-efficacy and CET-4 reading achievement was conducted.

Results

Descriptive Statistics

As is shown in Table 1, the mean of reading core in CET-4 test is 179.05, the mean of total score in CET-4 test is 486.68 and the mean of reading self-efficacy is 58.63, which means that for the majority of students who passed CET-4 test, reading scores tend to account for a large percentage of the total score. As a whole, most students have a high reading self-efficacy. In addition, the range of reading score is 135 and the range of total score is 234, which means students' English proficiency varies widely and many students still have a lot of room for improvement in English learning.

Table 1

Descriptive Statistics in CET-4 Test

	Reading score	Total score	Self-efficacy
Valid	40	40	40
Missing	0	0	0
Mean	179.05	486.68	58.63
Median	180.00	474.00	61.00
Mode	180	443	46
Sta. deviation	29.60	52.65	10.01
Range	135	234	43
Minimum	108	426	34
Maximum	243	660	77

In addition, according to the results of reading self-efficacy, we found that 45% of the students (basically meet) believed that they were capable of doing well in English reading, and 50% of the students (basically meet)

deemed that English reading was easier for them compared to English listening, writing, and translation. Overall, the mean of reading self-efficacy shows that students' reading self-efficacy is high.

Correlation Between Self-efficacy and CET-4 Reading Achievements

The data in Table 2 through SPSS 25.0 statistical software showed that the correlation coefficient between students' reading self-efficacy and reading achievement is 0.614 ($p < 0.01$), indicating that students' reading self-efficacy is significantly positively correlated with reading achievements and the correlation was medium high. This means that students with high reading self-efficacy also have higher reading scores and vice versa.

Table 2

Correlation Between Self-efficacy and CET-4 Reading Achievements

		Reading score	Self-efficacy
Reading score	Pearson correlation	1	0.614**
	Sig.(2-tailed)		0.000
	<i>N</i>	40	40
Self-efficacy	Pearson correlation	0.614**	1
	Sig. (2-tailed)	0.000	
	<i>N</i>	40	40

Note. ** Correlation is significant at the 0.01 level (2-tailed).

This research showed that the level of self-efficacy can directly influence students' English reading achievements. Students who feel confident that they can learn English reading well, put more effort into English reading, use appropriate solutions when they encounter difficulties, and have good emotional control abilities are more likely to succeed in their English reading studies.

Pedagogical Implications

The correlation between self-efficacy and CET-4 reading achievements of non-English college students suggests that it is necessary for English teachers to train students in self-efficacy and reading methods. In practical teaching activities, teachers consciously adopt appropriate reading skills as well as some methods that effectively improve students' self-efficacy can help students improve their reading abilities better.

Guiding Students to Put More Effort in English Reading

According to the results of the reading self-efficacy, the mean of students' effort was lower compared to their confidence level, problem-solving skills, and emotional control. This implies that students' reading motivation is relative low and they put less effort into reading in general. For non-English college students, they consider English more as a tool, so they focus more on improving their test scores and neglect the development of their interest in English. Students' interest in English reading largely influences their efforts in English reading. Therefore, teachers should focus on stimulating students' interest in English reading in their daily teaching activities. For example, teachers are supposed to select appropriate reading materials for students, provide them with interesting reading materials, and increase the diversity of reading teaching activities, so as to cultivate students' interest in English reading and enhance students' efforts in English reading. In addition, teachers should make students aware of the importance of English reading, so that they can improve other English abilities through their progress in English.

Establishing a Positive Feedback Mechanism

As a whole, students have a high reading self-efficacy, but we can see that there are still some students who lack confidence in English reading. Therefore, teachers should help students build self-confidence in the teaching process, especially by consciously encouraging students who lack confidence. For students who lack confidence, teachers should always praise them and recognize their progress. This positive feedback mechanism can make students who are learning English have more confidence. At the same time, teachers should encourage students who lack confidence to participate more in classroom interactions and give them appropriate praise in order to enhance their self-confidence in English reading class. Therefore, if teachers are aware of the importance of positive feedback in building students' confidence and make full use of it in practical class teaching, students' confidence will be improved to a certain extent, which can enable students to make more progress in English reading.

Conclusion

This study explored the correlation between college students' reading self-efficacy and reading achievements, and the results showed students' reading self-efficacy is significantly positively correlated with reading achievements and the correlation was medium high. Through the analysis, we found that students' reading self-efficacy is generally high, but the differences among students are relatively large and some students still have more room for improvement. Therefore, in order to make students make more progress in English reading, this paper provide teachers with some suggestions. It is hoped that teachers adopt effective teaching strategies to enhance students' reading self-efficacy. Of course, there are still some limitations in this research. The data in this study may need to be analyzed and studied in more depth. In addition, the sample size of this study is relatively small. If conditions permit, we hope we pay more attention to these issues and try to overcome these limitations in future studies.

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