



Investigating EFL Learners' Self-efficacy and Their English Learning Anxiety in Chinese University English Classroom

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Abstract. Emotion is an important factor that affects foreign language learning. This study conducted a questionnaire survey among 150 Chinese college students and an interview with 8 Chinese college students. Statistical analysis and thematic analysis were utilized to investigate students' self-efficacy and learning anxiety in English classroom, as well as the correlation between the two and their influence on learners' learning status. The results show that: 1) Chinese university students' English learning ability efficacy is significantly and negatively linearly related to English learning anxiety; 2) The four factors of learning anxiety including worry, nervousness, fear of speaking English, and fear of being asked questions in class can explain 70.5% of the changing reasons to the efficacy of English learning ability. The above findings are of great significance to how to construct an efficient foreign language classroom environment and promote learners' development from the perspective of humanistic learning theory.

Keywords: Foreign language classroom · EFL learners · Self-efficacy · English learning anxiety

1 Introduction

Due to the non-target language environment in China, Chinese university students learn English mainly through the classroom. However, traditional research on foreign language teaching lays too much emphasis on learners' cognitive ability, it ignores the important role of learner's emotional factors in English learning. The reality of the foreign language classroom proves that English language learning anxiety is a significant factor in students' ability to learn English. Several studies have shown that greater classroom participation and more interaction between teachers and students are beneficial to

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B. Majoul et al. (Eds.): ICLAHD 2022, ASSEHR 726, pp. 521–530, 2023.

https://doi.org/10.2991/978-2-494069-97-8_66

students' English learning [1–3]. Studies on English self-efficacy and foreign language classroom anxiety among college students have been conducted internationally [4, 5]. Conversely, from the perspective of humanistic learning theory, little research has been done on the relationship between these two affective factors and their impact on English learning. Based on humanistic learning theory, this study presents an analysis of the relationship between English learners' self-efficacy and learning anxiety, explores the correlation between them, and puts forward the role of humanism in reducing learning anxiety and improving English learning efficacy.

2 Literature Review

2.1 Self-efficacy

In the 1970s, a famous American psychologist called Bandura argued that one of the significant parts of social study theory is self-efficacy. Bandura defined self-efficacy as a subjective assessment of an individual's ability to achieve goals. He believed that people's behavior, thinking patterns, and emotions were influenced by their expectations of the ability to conduct behavior and results [6]. Zhang argues when the sense of self-efficacy is strong, anxiety will be reduced: when the sense of self-efficacy is weak, anxiety will be aroused, and individuals will take actions such as withdrawal, avoidance, and protection [7].

2.2 Self-efficacy in English Learning

According to Bandura's definition of self-efficacy, Da argued English learning self-efficacy refers to students' subjective estimation of whether they can complete their studies and achieve satisfactory results to avoid academic failure [8]. Mo supposed that self-efficacy in English learning can be understood as students' subjective judgment on whether they can learn English well [9]. Most scholars base their statements on Bandura's interpretation of self-efficacy by integrating Bandura's definition with their own papers, but there is no clear and widely accepted definition.

2.3 English Learning Anxiety

The concept of foreign language learning anxiety was firstly introduced by Horwitz. According to him, he sees foreign language anxiety as a distinctive complex of self-perceptions, beliefs, emotions and behaviors. This distinctive complex related to language learning in the classroom, which drives from the unique nature of the language learning process. He argues that foreign language anxiety belongs to a kind of situational anxiety [10]. Horwitz believed that foreign language learning anxiety is a key self-cognition, belief and affective complex related to language learning in the classroom that arises during the language learning process [11]. Zhang & Yuan agreed that most empirical studies confirmed a negative relationship between English learning anxiety and self-efficacy [4].

According to Zeng, Wang, & Zhang, they analysed the relevance of self-efficacy to psychological anxiety among Chinese university students. Their data showed a strong

association between their self-efficacy and psychological anxiety [5]. Li had the same conclusion. According to Li, self-efficacy has a positive effect on reducing English learning anxiety among university students. As the sense of self-efficacy increases, the sense of anxiety of learning English in students will decrease [12]. Choi, Jung, & Lee argue that stimulating students' self-efficacy and autonomous study are able to lower students' English learning anxiety [13]. Bensalem stated that English learning anxiety may not be a trouble for those with high self-efficacy and outstanding English language skills [14].

On the contrary, Tahsildar & Kabiri, the authors claim they found a great positive link between students' self-efficacy and their anxiety about speaking English, which is completely different from the research of Zeng, Wang, & Zhang, Li, Choi, Jung, & Lee, Bensalem, Tahsildar & Kabiri maintained that the lack of awareness of spoken English may be the cause of the high level of English speaking anxiety [5, 12–15].

To sum up, most of the current studies' perspectives are relatively single, and they only mention the prediction effect and mutual relationship of various emotional factors. This paper, based on humanistic learning theory, explores the influence of foreign language classroom environment on the self-efficiency and anxiety of learners, as well as the reaction of two kinds of important emotional changes on individual external performance.

3 Research Questions

This study aims to investigate the association between English language learning efficacy and English language learning anxiety in the English classroom environment of Chinese university students and its influence on English language learning. To achieve this purpose, the following questions were raised:

- (1) What levels of English learning anxiety and self-efficacy do English learners have in university English courses in China?
- (2) How does English learners' learning anxiety relate to self-efficacy in Chinese university English classes?
- (3) How do English learning anxiety and self-efficacy influence English learners?

4 Research Design

4.1 Research Participants

This study selected 150 college students from various areas of mainland China, with different ages, genders, and English proficiency as the research participants. The participants are from 19 provinces in China, most of which come from Hubei province, accounting for 33%.

4.2 Research Method

The researchers used the methods of questionnaire survey and interview to collect data. The researcher explained the research purpose, research method, and research process, and declared the privacy protection of their data to the surveyed students in the description section of the questionnaire. Two different widely accepted questionnaires were used in collecting data by the researchers. One of the questionnaires is the English Self-efficacy Questionnaire ESEQ2 compiled by Da and the Foreign Language Classroom Learning Anxiety Scale (FLCAS) developed by Hortwitz et al. [8, 10]. To let participants fully understand the survey, a Chinese version of FLCAS compiled by Wang was used to collect data [16]. To verify the results of the questionnaire, student interviews were also conducted. The researchers selected a certain number of students who finished the questionnaire to take part in one-on-one interviews through phone calls. All scales are rated on a 5-point Likert scale with values of 1 to 5 attributed to every signifier ranging from “Strongly Agree” to “Strongly Disagree” measuring student anxiety and self-efficacy in the English classroom. The greater the FLCAS score, the less anxious English classes are. The higher the ESEQ2 score, the less Self-efficacy in English language class.

4.3 Data Collection and Analysis

This study focuses on self-performance and English learning anxiety among English learners in Chinese college English classrooms. This study used Wenjuanxing to collect data. In total, 150 surveys were delivered, of which 129 were selected as valid. SPSS 26.0 were used by researchers during the data analysis part.

5 Research Result

5.1 Results of English Learning Ability Efficacy

According to the ESEQ scale compiled by Da, English self-efficacy is divided into two factors: English learning behavior efficacy and English learning ability efficacy (34, 35, 36, 37, 38, 39, 40). This study focuses on English learning ability [8].

Data analysis shows that the average value of these college students' English learning ability efficacy is 2.9014, which exceeds the average (2.50), indicating that the student's English learning ability self-efficacy is in the lower middle level. The highest score of English learning ability efficacy is 5, the lowest score is 1, and the standard deviation is 0.92147. The scale's Cronbach coefficient Alpha is $0.887 > 0.8$, and the reliability is high. According to the data above, the self-efficacy score data has a greater degree of dispersion, and the distribution is more scattered. In the traditional English classroom environment, students learn English from an early age, but due to the lack of the atmosphere of second language use in the social environment, most students learn and use English in the classroom. Therefore, students generally have a medium-high self-efficacy in English learning ability.

Table 1. The correlation between English learning anxiety and learning ability efficacy

		English learning anxiety	English learning ability efficacy
English learning ability efficacy	Pearson correlation	-.830**	1
	Sig. (2-tailed)	.000	

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

5.2 Results of English Learning Anxiety

FLCAS scale with Chinese translation compiled by Wang was used to gather data about anxiety in learning English. The reliability of the scale in the four dimensions of the questionnaire is 0.841, 0.825, 0.837, and 0.869. The Cronbach coefficient Alpha of each dimension is greater than 0.8, and the reliability is high. The questionnaire had a KMO of 0.907, indicating that the questionnaire was valid. The significance of Bartlett's sphericity test is 0.000, $p < 0.05$, indicating that it is ideally suited to factor analysis. Wang conducted factor analysis on this scale and identified four dimensions, worry (4, 7, 8, 10, 11, 15, 16, 19, 25, 29), nervousness (5, 6, 17, 18, 21, 22, 26, 28, 30), fear of speaking English (1, 2, 14, 23, 24, 31, 32) and fear of being asked questions in class (3, 9, 12, 13, 20, 27, 33) [16].

By analyzing the questionnaires of EFL learners, it is noticeable that the average value of four dimensions are 2.9783, 2.9492, 2.8605, and 2.8970. Among these four dimensions, students have the strongest sense of anxiety because of worry, and students have the weakest sense of anxiety because of the fear of speaking English. The standard deviations of the four dimensions are 0.78829, 0.79653, 0.87927, and 0.88135. The standard deviation represents the degree of dispersion of the data. There is a small degree of dispersion shown by students' anxiety scores because of worry with a more concentrated distribution. Conversely, a large degree of dispersion of found through students' anxiety scores of students because of the fear with a more scattered distribution.

5.3 Correlation Between English Learning Ability Efficacy and Learning Anxiety

Table 1 indicates the correlation factor between the two is $r = -0.830$, $0.8 < |r|$, $\text{sig} = 0.000 < 0.01$, which proves that there is a significant negative linear correlation between learning anxiety and English learning ability efficacy.

Therefore, the results of this study once again prove that in the traditional classroom environment. The efficacy of English learning ability will be negatively affected by learning anxiety. The higher the anxiety in learning English, the lower the efficiency in learning English.

5.4 The Correlation Between English Learning Ability Efficacy and Each Dimension of Learning Anxiety

As Table 2 shows, it is noticeable that the P values of the relationship between the four dimensions and the efficacy of English learning ability are all less than 0.01, which means

Table 2. The Correlation between English learning ability efficacy and each dimension of learning anxiety

		Worry	Nervousness	Fear of speaking English	Fear of being asked questions in class	English learning efficacy
English learning efficacy	Pearson correlation	-.805**	-.797**	-.758**	-.700**	1
	Sig. (2-tailed)	0	0	0	0	

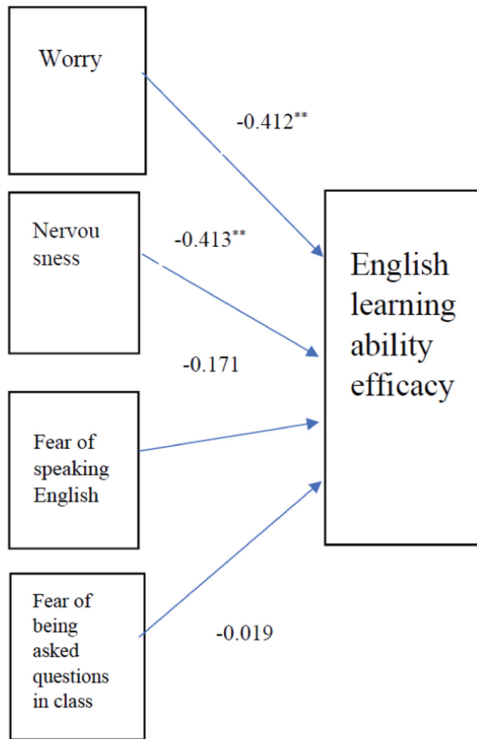


Fig. 1. Linear regression model

that the four dimensions of learning anxiety have a strong negative linear relationship with the effectiveness of the ability to learn English.

Table 3. Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.892	.182		32.407	.000		
	Worry	-.412	.127	-.353	-3.241	.002	.201	4.987
	Nervousness	-.413	.110	-.357	-3.761	.000	.264	3.794
	Fear of speaking English	-.171	.116	-.163	-1.466	.145	.193	5.191
	Fear of being asked questions in class	-.019	.101	-.019	-.191	.849	.253	3.956

^aDependent Variable: English learning ability efficacy

Table 4. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.840a	.705	.696	.50821	2.134

^aPredictors: (Constant), worry, nervousness, fear of speaking English, fear of being asked questions in class

^bDependent Variable: English learning ability efficacy

5.5 Linear Regression Analysis of Each Dimension of English Learning Ability Efficacy and Learning Anxiety

Based on relevant literature work and collected data, according to Fig. 1, the researchers established a linear regression model with five variables including worry, nervousness, fear of speaking English, fear of being asked questions in class, and efficacy of English learning ability.

According to Table 3 the model VIF < 10, tolerance > 0.1, indicating that there is no severe multicollinearity, which means the model is available.

According to Table 4, it is noticeable that the R square is 0.705, indicating that worry, nervousness, fear of speaking English, and fear of being asked questions in class can explain 70.5% of the changes in English learning ability efficacy.

The degree of explanation is medium-high level. The model is well constructed.

Significant < 0.05 indicates that the independent variable is impacting the dependent variable, and the researchers also find that the influential variables are worry and nervousness.

5.6 Analysis of Interview Results

To investigate students' English learning anxiety, we conducted one-on-one interviews on students' anxiety factors. According to the interview data, 6 of 8 were students who are easily get anxious. Among these six students, three said they were easily anxious in English class, and the other three students who are easily get anxious in their daily life but not in English class. The seventh student said that he was anxious when he was not competent enough or had a poor pre-test mock test score. It shows that most of these students will have English learning anxiety, and those who easily get anxious in their daily life are more likely to have English learning anxiety.

Three interviewees think their English learning ability is average, the other four think their English learning ability is good, and the last one thinks his/her English learning ability is relatively fluctuating. Generally speaking, the effectiveness and self-efficacy of the interviewees' English learning ability are above average.

6 Discussion

6.1 English Learning Ability Efficacy and English Learning Anxiety

A negative correlation exists between the effectiveness of English learning ability and the four dimensions of English learning anxiety, which is evident from the results of the study. Among the four dimensions, worry and nervousness have a major negative impact on the effectiveness of English learning ability. Macintyre, Noels & Clement concluded that anxiety was negatively correlated with perceived foreign language self-efficacy [17]. This view is consistent with the findings of this study that the greater the level of anxiety in learning English, the lower the effectiveness of English learning skills. Worry and nervousness are strongly correlated with the efficacy of English learning ability. This shows that the learner's own emotions are the main source of influence on the learners' evaluation of their own English learning ability. Wang referred to learners' self-evaluation of their foreign language learning ability as the "self-concept of foreign language learning". A person with poor self-concept in foreign language learning will easily get anxious, and he/she may not have a strong foreign language learning motivation and positive learning attitude [18]. Therefore, in order to improve students' English learning ability efficacy and relieve English learning anxiety, the researchers should start with the students themselves which is one of the main reasons why this paper chooses to discuss from the perspective of humanistic learning theory.

6.2 Humanistic Learning Theory and Efficacy of English Learning Ability

Carl Rogers is the most famous humanistic psychologist and educational reformer in America. He pays special attention to emotional factors. Rogers & Hong supposed that there is a need to take the students as a centre and let students learn spontaneously as well as actively. The task of teaching is to create appropriate and reasonable conditions and provide an effective self-directed learning environment that promotes the development of students' potential and enables them to develop into true self-actualizers [19]. Although Roger's viewpoint exaggerates the effect of potential on students learning ability, it still is

instructive for this essay. In order to improve students' self-efficacy in English learning, the authors believe that teachers' guidance should be combined with students' self-guidance, and a proper self-learning and student-centered environment should be created for students in this process. The most important step is to create a good psychological environment, and establish an equal, harmonious, and mutually trusting relationship between teachers and students so that in addition to the exchange of knowledge, in the emotional sphere, the interaction of the pupil and teacher is also introduced.

6.3 Humanistic Learning Theory and English Learning Anxiety

Horwitz believed that anxiety related to learning foreign languages is an important complex of self-perception, belief and emotion engendered by the language learning process associated with learning languages in the classroom [11]. To examine the causes of anxiety from the point of view of human psychology, humanistic psychologists believe that human growth derives from the necessity of individual self-realization. Wang mentioned that people will try their best to maintain their self-concept out of the instinct of self-protection, so an invisible but protective psychological barrier is formed [18]. To sum up, the reason why people with poor self-concept in foreign language learning appear is that their psychological barrier of self-protection is broken after they are unable to carry out self-realization. As a result, the self-evaluation of people with poor self-concept in foreign language learning is low, resulting in English learning anxiety and a decrease in English learning ability efficacy.

7 Conclusion

The main findings of this paper are: 1) An apparent negative correlation between the effectiveness of the ability to learn English and the anxiety of learning English was found by the researchers. 2) A harmonious teacher-student relationship should be established to create a good psychological environment for teaching to reduce students' anxiety as much as possible.

Current research has yet to be developed theoretically, and this study only explores theoretical aspects and lacks empirical research. It is still worthwhile for researchers to explore and practice how to take pedagogical measures to create a good psychological environment for students and change the traditional classroom teaching environment.

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