



# The Correlation Between Anxiety Levels and Foreign Language Learning Among University Students

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**Abstract:** Anxiety is a prevalent psychological state that significantly impacts foreign language learning. Specifically, "second/foreign language anxiety" (FLA) refers to the anxiety associated with the acquisition of a foreign language, characterized by learners' negative emotional reactions. Foreign language acquisition encompasses a complex range of self-perceptions, beliefs, feelings, and behaviors related to language learning. Research has indicated a connection between anxiety levels among university students and their foreign language learning outcome. Studying the correlation between anxiety in foreign language learning and academic performance can provide valuable insights for enhancing learning strategies, reducing anxiety levels, and improving overall academic achievement. In this study, a survey was conducted among 315 college students majoring in English and Japanese at Guangdong Institute of Science and Technology. The aim was to examine the relationship between anxiety in foreign language learning and students' language learning performance. The collected data were processed using the SPSS27.0 statistical package. Descriptive statistics, one-item mean comparison, and independent sample t-test were employed as statistical methods. The survey results revealed a significant level of anxiety among students in the foreign language classroom. Furthermore, a noteworthy correlation was observed between English grades and the level of anxiety, with higher grades being associated with lower anxiety levels. These findings underscore the importance of alleviating anxiety during classroom instruction, as it can positively influence learning outcomes.

**Keywords:** anxiety level, foreign language learning, correlation

## I. Introduction

Anxiety entails a distressing emotional experience characterized by excessive self-concern, mistrust in the subject of study, and self-doubt regarding one's abilities and potential. Studies have shown that anxiety adversely affects students' effectiveness and efficiency in learning English. Consequently, finding ways to assist students in overcoming anxiety and enhancing language learning efficiency has become a key concern in the field of foreign language teaching. As second language acquisition theories have evolved, researchers have increasingly focused on the causes and factors influencing learners' anxiety. However, most empirical studies in China have primarily examined learners' internal factors in relation to anxiety and foreign language learning, limiting their direct applicability to teachers' instructional practices.

Therefore, this study aims to investigate and analyze the relationship between anxiety levels and foreign language learning performance among students from freshman to senior years in the College of Foreign Languages at Guangdong University of Science and Technology. The findings seek to enhance our understanding of the connection between anxiety and foreign language learning performance, ultimately offering valuable insights to guide effective teaching practices. Ultimately, it can help students to improve their foreign language learning efficiency.

## II. Literature Review

The field of foreign language teaching has been significantly influenced by psychological factors, leading to numerous studies investigating the correlation between language learning and affective variables. These variables encompass various personality factors such as self-esteem, risk-taking, empathy, extroversion, motivation, and anxiety [1].

Anxiety, when confined to specific situations like using a foreign language, is referred to as specific anxiety. In contrast, the term general anxiety is applied to individuals who experience anxiety across multiple situations [2]. According to the traditional psychological classification [3], trait anxiety pertains to individuals who are generally anxious in diverse situations, while state anxiety refers to those who experience anxiety exclusively in specific circumstances.

The term "second/foreign language anxiety" (FLA) is used to describe anxiety associated with learning a foreign language, particularly the negative emotional reactions exhibited by learners during the process of language acquisition



[3] FLA is regarded as a multifaceted phenomenon involving self-perceptions, beliefs, feelings, and behaviors related to foreign language learning [2].

In 1986, Horwitz developed the Foreign Language Classroom Anxiety Scales (FLCAS), which has since become the most commonly used research instrument for measuring anxiety in foreign language learning due to its established reliability and validity[4].

Chinese scholar Wang Cai Kang translated the Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz et al. in 2003 and assessed its reliability and validity, demonstrating high internal consistency and a Cronbach coefficient of .89 for the scale[5].

Chastain investigated the impact of foreign language learning anxiety on primary language courses, revealing a negative correlation between anxiety and performance on a French listening test[6]. Similarly, Gardner et al., Trylong, MacIntyre and Gardner, Philipps, and Aida discovered a negative correlation between foreign language learning anxiety and academic performance[7][8][9][10][11].

Subatira et al. employing the FLCAS, explored the correlation between foreign language anxiety and academic performance, finding a significant negative correlation between the two variables. The study concluded that foreign language learning anxiety negatively affected academic performance, while self-efficacy positively influenced it [12] [13].

Hao Mei and Hao Ruoping examined the correlation between state anxiety, motivation, and academic performance, revealing that anxiety significantly impacted academic performance, with girls displaying higher levels of anxiety than boys.[14]

Zhang Risheng and Yuan Limin investigated the relationship between foreign language anxiety, self-efficacy, and academic performance among 315 non-English majors.[15]

Zheng Xiao found no significant gender difference in terms of foreign language anxiety and academic performance. However, self-efficacy and academic performance exhibited significant gender differences [16].

Yu Weihua, Shao Kaiqi, and Xiang Yizhen explored the correlation between emotional intelligence, foreign language learning anxiety, and English learning performance among non-English majors.[17]

Fei Wei discovered a negative correlation between foreign language anxiety and academic performance in their study on the impact of foreign language anxiety on general competence in an online environment.[18]

Dong Lianqi conducted a meta-analysis investigating the correlation between foreign language anxiety and academic performance, revealing a negative correlation between the two variables.[19]

In a study conducted by Chinese scholars Shi Yu and Xu Jinfen, it is argued that anxiety represents a highly intricate affective variable. Its impact on students' performance cannot be simplistically assumed, as it should be evaluated in accordance with the specific circumstances of the participants [20].

### III. Research Methodology

3.1 Participants: The study included 315 undergraduate students from the School of Foreign Languages at Guangdong Institute of Science and Technology (GDIST), comprising 143 English majors and 172 Japanese majors. The participants had an average age of 21.95 years and were in their first to fourth years of study.

3.2 Data Collection: The study employed the Foreign Language Classroom Scale (FLCS) developed by Horwitz et al. and the State Anxiety Inventory (SAI) developed by Spielberger. The FLCS consisted of 33 items, ranging from 11 to 43 questions, covering three main areas: communicative anxiety, test anxiety, and negative evaluation anxiety. Responses ranged from "not at all" to "fully compliant." The SAI used a 4-level scale to measure state anxiety, ranging from "very little anxiety" to "very much anxiety." To ensure consistency in the scoring of each scale, the scores of specific questions (12, 15, 18, 24, 28, 32, 38, 42, 44, 45, 48, 51, 53, 54, 58, 59, 62, and 63) were reversed based on the meaning of the questions. Mean values for each dimension of the two scales were separately calculated for subsequent analysis. The researcher provided an introduction to the study's purpose, explained the use of the scales, addressed potential areas of confusion, and guided the students in completing the questionnaires.

3.3 Statistical Analysis: Data processing was performed using the SPSS 27.0 statistical package. Descriptive statistics, including mean comparisons of single items and independent sample t-tests, were conducted.

### IV. Results and Analysis

A total of 315 questionnaires on students' language learning and anxiety were collected. After eliminating samples with significant deficiencies, 307 valid samples remained, resulting in a validity rate of 97.46%. To ensure consistent interpretation of scores, specific questions (12, 15, 18, 24, 28, 32, 38, 42, 44, 45, 48, 51, 53, 54, 58, 59, 62, and 63) were reverse scored based on the meaning of the questions. Mean values for each dimension of the two scales were then calculated separately for subsequent analysis.

According to descriptive statistics results, the descriptive analysis results are as follows: The mean and standard deviation of the dimensions of foreign language classroom anxiety were calculated, and the level of variance was analyzed. The results are as follows: The mean value of the dimensions of foreign language classroom anxiety was 2.856, with a corresponding standard deviation of 0.51. The foreign language classroom anxiety scale was a five-level scale, and the corresponding mean level score was 3. The one-sample t-test yielded a t-statistic of -4.945, indicating a

significant difference between the mean value of the foreign language classroom anxiety dimension and its mean level ( $p < 0.05$ ). The mean score of the foreign language classroom anxiety dimension was significantly lower than the mean. Similarly, the mean value of the state anxiety dimension was 2.397, with a standard deviation of 0.438. There was no significant difference between the state anxiety dimension score and its mean ( $t = -4.131$ ,  $p = 0.000 < 0.05$ ). Higher scores on the state anxiety dimension indicated higher levels of anxiety in the respondents, indicating a lack of state anxiety.

Table 1: Results of One-Sample t-Tests

Variable	Test Value	Sample Size	Mean	Standard Deviation	t	p
Foreign Language Anxiety	3	307	2.856	0.51	-4.945	0.000***
State Anxiety	2.5	307	2.397	0.438	-4.131	0.000***

Note: \*\*\*, \*\*, \*, represent significance levels of 1%, 5%, 10% respectively.

## V. Conclusions and Suggestions

Based on the questionnaire results, it is evident that foreign language classroom anxiety is prevalent among university students in our institution. It is crucial to effectively address and alleviate students' English anxiety to enhance their foreign language learning performance. In the current educational landscape, it is crucial to assist students in developing appropriate learning strategies and enhancing specific cognitive skills in order to tackle the set of challenges they face. This approach can foster student motivation, promote emotional awareness, optimize learning styles and conditions, and strengthen self-monitoring abilities. Ultimately, these factors can greatly enhance learning efficiency.

Foreign language instructors should prioritize students' language acquisition during the teaching process by fostering self-confidence and assisting them in overcoming language learning anxiety. Encouraging active participation in classroom activities such as group work, role-playing, speech contests, and debates can bolster students' self-confidence. Additionally, employing various teaching methods such as lectures and seminars can help students grasp relevant knowledge and cultivate the right motivation for learning. Furthermore, teachers should attentively listen to students' opinions and concerns, comprehend the challenges they face during the learning process, and provide timely assistance and guidance.

Self-confidence plays a vital role in learners' mindset as they assess and trust their own abilities. When learners believe in their capability to acquire a language proficiently, they are more likely to surmount obstacles and make progress. Foreign language instructors should provide ample encouragement to students, especially those experiencing psychological pressures, demonstrating tolerance and understanding. It is essential for teachers to treat their students with sincerity, fostering an atmosphere of respect and inclusiveness. Encouragement from teachers serves as recognition for students, bolstering their self-confidence and subsequently improving their academic performance.

Building upon these findings, it is recommended that foreign language teachers possess solid professional knowledge, exhibit personal cultivation, uphold high moral character, and possess a basic understanding of psychology to comprehend the diverse emotions experienced by students during the learning process, particularly the negative effects that impact them. Teachers should adapt their teaching styles flexibly to cater to students' needs, creating a relaxed, harmonious, and enjoyable classroom environment. Furthermore, teachers should develop customized learning objectives and programs to help students overcome anxiety and enhance their self-confidence. Active communication with students regarding learning styles and outcomes is crucial. Conducting questionnaires and soliciting student feedback on classroom teaching and extracurricular activities can establish effective communication channels, allowing teachers to tailor their instructional approaches accordingly.

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