

# *The Influences of EFL Graduate Students' Gender, Major and English Proficiency on FLA*

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**Abstract**—This paper aims to study non-English Major EFL graduate students' foreign language anxiety and the differences of foreign language anxiety related to different gender, major and English proficiency in Northwest China. By using questionnaire, this study investigated 313 non-English major EFL graduate students at Shaanxi Normal University. The results found that: at least two-thirds of non-English major graduate students in English classes experience a moderate to high degree of foreign language anxiety; there is no significant difference of foreign language anxiety related to gender; a significant difference of foreign language anxiety exists between liberal arts and science students and liberal arts students' anxiety level is slightly higher than that of science students; English proficiency levels have significant influence on graduate students' foreign language anxiety.

**Keywords**—Foreign language anxiety, Gender, Major, English proficiency

## I. INTRODUCTION

Foreign Language Anxiety (FLA) is a major emotional disorder that affects foreign language learning. It is a complex, multidimensional phenomenon [1]. If learners often feel anxious, anxiety can become a trait or psychological quality. The earliest term "foreign language anxiety" was suggested by American scholars Horwitz, Horwitz and Cope, who think that anxiety is a subjective feeling of tension, nervousness, and annoyance caused by one's autonomic nervous system[2]. This kind of feeling may not only hinder the learner's study in mathematics and science, but also exert great pressure on the learner's foreign language learning. Therefore, FLA is a kind of complex of learners' self-perception, belief, emotion and behavior related to foreign language classroom learning, which is produced due to the uniqueness of language learning process.

Horwitz et al. claimed that there were three components of foreign language anxiety: communication apprehension, test anxiety, and fear of negative evaluation. Communication apprehension refers to, in the process of foreign language communication, the anxious feeling that arises when you do not understand the meaning of others or can't express your thoughts well. Therefore, language learning anxiety has a great influence on the ability of language communication. Test anxiety is caused by the fact that students do not grasp required language knowledge and are afraid of failing to pass their tests. On the other hand, some students will bring the experience of past exam failure into new test environment, thus forming a fixed pattern that creates a vicious circle. Fear of negative evaluation

means that students with low self-evaluation are always afraid of being negatively evaluated by teachers and classmates[2]. Excessive self-concern has an enormous impact on foreign language learning, and negative self-concern can have a negative impact on learning. In short, foreign language anxiety is an important individual difference characteristic of learners in the process of foreign language learning and use. It has a continuous and significant influence on foreign language learners and their learning behaviors.

This study aims to examine Chinese non-English major EFL graduate students' FLA at different gender, majors and proficiency levels. To achieve this, a triangulated method was adopted and three research questions were proposed:

- What is the overall status of graduate students' English learning anxiety?
- And to what extent do the students experience anxiety in English classrooms?
- What are the differences in anxiety among the students under the influence of variables such as different gender, majors, and English proficiency levels?

Based on this research, this study attempts to put forward some effective strategies for relieving graduate students' English learning anxiety, providing useful reference for English teaching workers so as to improve the level of English teaching.

## II. LITERATURE REVIEW

As early as the 40s and 50s of the 20th century, anxiety had become the focus of the study and practice of educational psychology. The study of foreign language learning anxiety began in the 1970s. Researchers have demonstrated that there are numerous factors that can affect an individual's language achievement when learning a foreign language. According to Jakobovits[3], the percentage of factors affecting language achievement is 33% for gender, 33% for affective factors, 20% for intelligence, and 14% for other factors. This set of data shows that the affective factors are more important than intelligence factor. A report by Gardner and Lambert indicates that foreign language learning anxiety is inversely related to academic achievement. It is also found that the most common source of FLA is "speaking" foreign language, and FLA has a

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negative correlation with writing test and oral test[4]. Aida used the foreign language classroom anxiety scale (FLCAS) proposed by Horwitz et al (1986) to study Japanese students' foreign language learning anxiety and found: communication apprehension and fear of negative evaluation are important components of foreign language anxiety, which is similar to the theory of Horwitz et al., but he also found that test anxiety didn't form a part of foreign language anxiety, which is different from the finding of Horwitz et al[5].

For the study of the factors affecting FLA, the results are diversified. In terms of gender difference, Barrett, Lane, Sechrest and Schwartz showed that only half of the relevant studies reported that there were gender differences in language anxiety, and that this may be related to different emotional expressions of male and female[6]. Matsuda and Gobel concluded that spoken language self-confidence, gender and academic ability play an important role in the classroom performance of first-year students[7]. Koul, Roy, Kaewkuekool and Ploisawaschai found that girls' anxiety was significantly higher than that of boys, and that this was related to the theory of role socialization and self-esteem[8]. Park and French pointed out that girls had higher levels of anxiety than boys[9]. However, Gender-related FLA research has yielded conflicting results. Shang's study showed that in English writing test, compared with girls, boys feel more anxious and have higher test scores than girls[10]. Ra and Rhee concluded that gender related differential item functioning (DIF) appeared in FLCAS. Out of 25 items of FLCAS, two items were found to exhibit gender related DIF after correcting inflated Type I error[11].

In the study of major and English proficiency differences, the results of the study were consistent. Wang and Ding investigated the FLA of middle school students in western China and found that the anxiety degree of boys is higher than that of girls; the anxiety degree of the students with low English level is higher than that of excellent students; and there is no significant anxiety difference between liberal arts and science students[12]. Liu, in 2006, and Liu and Jackson, in 2008, investigated the English learning anxiety of 547 non-English major undergraduates at Tsinghua University. They found that students' unwillingness to communicate are significantly related to their anxiety and English proficiency; the higher their English proficiency level is, the lower their anxiety is[13][14].

In sum, the prior literature on the factors influencing FLA prompts the researcher to expand the study agenda to confirm or disconfirm if these affective variables are stable across settings. This study hypothesizes that FLA varies according to diverse educational settings and cultural contexts because students are bound to respond to the varied instructional methods. This also confirms the current research trend where the goal is to acknowledge the situation-specific, context-sensitive, and different characteristics each learner brings to foreign language classroom.

### III. METHOD

#### A. Participants

To understand how anxiety functions in foreign language learning, it was necessary to include learners with a range of anxiety levels. For that reason, the study adapted the Foreign

Language Classroom Anxiety Scale (FLCAS) made by Horwitz, et al. in 1986 and administered EFL 313 students of non-English majors from 7 classes in the first year at Shaanxi Normal University. In order to ensure the comprehensiveness of the selected majors, the three liberal arts majors were education, politics and literature. The four science majors were physics, chemistry, psychology and mathematics. Among them, there were 75 males (24%) and 238 females (76%).

#### B. Instruments

This study was conducted using quantitative method. The quantitative research was mainly based on questionnaire. The questionnaire consisted of two parts. The first part was the basic background information of graduate students, including gender, major, and English proficiency. The second part was an adapted FLCAS of Horwitz et al. based on the learning characteristics of Chinese English learners. It included three dimensions, namely, communication apprehension, test anxiety, and fear of negative evaluation with a total of 33 multiple-choice questions. The option took the form of the Likert five-level scale from "1=completely disagree" to "5=completely agree". The total scale scores ranged from 33 to 165, with high scores indicating high levels of FL anxiety. Nine items (2, 5, 8, 11, 14, 18, 22, 28, and 32) were negatively worded, and their scores were reversely computed. The scale demonstrated internal reliability, achieving an alpha coefficient of .91, with all items producing significant corrected item-total scale correlations. Test-retest reliability yielded  $r = .83$  ( $p < .001$ ) [2].

#### C. Research Procedure

The questionnaire was distributed by English teacher in the class one week before final exam. A total of 351 questionnaires were issued and 317 were returned with 313 valid questionnaires, therefore the effective rate was 89%. The data was statistically analyzed by using SPSS 21.0 software. The statistical procedures were: (1) Descriptive statistical analysis, which was used to describe the basic situation of FLA level of the participating groups; (2) Using the T-test and ANOVA to test the FLA index of the tested subjects in terms of different gender, major and English levels.

## IV. RESULTS AND DISCUSSION

#### A. Descriptive Statistical Results of the FLCAS

Based on the classifications provided by earlier studies [15], the mean scores were used to determine the levels of anxiety. In theory, the subjects' anxiety score is between 33 and 165 points. A total score of more than 144 means that the respondent shows higher anxiety in English class; a score of 108-144 indicates that the student is in moderate anxiety; and a score of less than 108 means no or little anxiety. The overall mean score for the FLCAS in the study was 120.07. This result indicates that the majority of the study participants had a moderately high level of anxiety based on the values in Table I.

### B. Gender Differences in Graduate Students' English Learning Anxiety

The distribution of the data was normal and the homogeneity of variance test was accepted ( $p > 0.05$ ). Therefore, independent sample T-test was conducted to test the differences in FLA between the male and female groups. The data in Table II shows that both the male and female groups have higher levels of anxiety in English learning, and the mean score of females ( $M=121.38$ ) is slightly higher than that of males ( $M=115.89$ ), indicating that the anxiety level of the female group is slightly higher than that of the male group; however, T-test shows that there is no significant difference between the male and female groups ( $p > 0.05$ ). This is basically consistent with the finding of Liu and Shi[16].

### C. Major Differences in Graduate Students' English Learning Anxiety

The homogeneity of variance test ( $p > 0.05$ ) showed that the data was suitable for independent sample T-test. Therefore, T-test was conducted to test the major differences in FLA. As shown in Table III, the anxiety level of liberal arts students is significantly higher than that of science students ( $p < 0.05$ ). This indicates that there is a significant difference in the FLA level between liberal arts and science students. In English learning, both have a higher level of anxiety. The mean score of liberal arts students ( $M=120.36$ ) is higher than that of science students ( $M=119.92$ ), indicating that the anxiety degree of

liberal arts students is slightly higher than that of science students. Because liberal arts and science students have different cognitive styles and learning motivations, science students are more rational when foreign language learning anxiety occurs. It may be the reason that the anxiety level of science students is generally lower than that of liberal arts students.

### D. Graduate Students' English Learning Anxiety of Different English proficiency

The homogeneity of variance test ( $p > 0.05$ ) showed that the data was fitted for ANOVA. Therefore, ANOVA was performed to test the FLA differences in Different English proficiency levels. The English proficiency levels of graduate students are divided into four levels according to the standards of national non-English major English Band 4 and 6 exams. As shown in Table IV, the results of the F-test show that there are significant differences in the FLA level among the four groups ( $F = 2.298, p < 0.05$ ). Students below CET-4 ( $M = 121.05, SD = 15.19$ .) and students with CET-4 ( $M = 119.81, SD = 15.12$ ) had significantly higher scores than those with CET-6 ( $M = 118.27, SD = 13.89$ ) and above CET-6 ( $M = 113.43, SD = 10.36$ ). The results show that the higher the English level of students is, the lower the FLA level is. It may be related to the fact that students with high English proficiency are not worried about their failure in English learning and test.

TABLE I. DESCRIPTIVE STATISTICAL ANALYSIS OF THE FLCAS ( $N = 313$ )

Item	Mean	S.D.	MIN	Median	Mode	MAX	Range
Score	120.07	14.80	63.00	121.00	116.00	158.00	95

TABLE II. DESCRIPTIVE STATISTICAL ANALYSIS ON ENGLISH LEARNING ANXIETY OF DIFFERENT GENDER

Gender(N)	Mean	S.D.	MIN	Median	Mode	MAX	Range	P
Male(75)	115.89	17.54	63	116	113	147	84	0.68
Female(238)	121.38	13.56	87	122.50	116	158	71	

TABLE III. DESCRIPTIVE STATISTICAL ANALYSIS ON ENGLISH LEARNING ANXIETY OF DIFFERENT MAJORS

Major (N)	Mean	S.D.	MIN	Median	Mode	MAX	Range	P
liberal arts(102)	120.36	13.92	87	121.50	124	147	60	0.026
Science (211)	119.92	15.20	63	120	116	158	95	

TABLE IV. DESCRIPTIVE STATISTICAL ANALYSIS ON FLA OF DIFFERENT ENGLISH PROFICIENCY

English proficiency(N)	Mean	S.D.	MIN	Median	Mode	MAX	Range	P
<CET-4(39)	121.05	15.19	89	122	122	154	65	0.021
CET-4(175)	119.81	15.12	63	120	123	158	95	
CET-6(92)	118.27	13.89	62	119.50	116	145	80	
> CET-6(7)	113.43	10.36	58	115	114	150	30	

<sup>a</sup>. Note: CET-4 and CET-6 are national English proficiency level tests in China and particularly set for non-English major.

## V. CONCLUSIONS

The results of this study show that at least two-thirds of graduate students experience moderate to high anxiety in

English class. Gender differences have no significant influence on graduate students' FLA. It is inconsistent with

the finding of Park and French[9], in a Korean context, who observed that females reported higher anxiety levels compared to males. Moreover, graduate students' FLA in the two majors are significantly different. Both liberal arts and science students have higher levels of anxiety in English learning. The anxiety of liberal arts students is higher than that of science students. English proficiency levels have significant effect on their anxiety in English learning. The higher students' English level is, the lower FLA level, which is similar to that found in the study of Liu[13], who labeled it "the more proficient students tended to be less anxious."

#### VI. RECOMMENDATIONS

This study has important implications for graduate student English teaching. Teachers should use effective strategies to alleviate students' negative FLA. Firstly, in English class, teachers and students should establish good interpersonal relationships. Friendly relationships create a positive learning atmosphere. Tseng argues that students feel less anxious and stress in classroom environments that emphasize collaborative activities by forming learning communities including both teachers and students[17].

Secondly, teachers should help students set specific English learning goals. Moreover, efforts are made to link student's learning goals to course objectives. Then, encourage students to achieve their learning goals and overcome their difficulties.

Finally, teachers should help students enhance their self-confidence in learning English. Let students understand that their learning ability can be continuously improved, and that they have the ability to succeed. If a teacher believes that the student can do it, the student will believe that he can achieve his or her own learning goals. Also, encouraging students to work hard and praising students' achievements are better way to increase students' self-confidence and reduce their anxiety.

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