Foreign Language Anxiety and Achievement: A Case Study of Prospective Overseas High Schoolers in China

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Abstract. The present study aimed to understand factors which can contribute to foreign language (FL) anxiety among prospective overseas high school students and correlation between FL anxiety and FL achievement. A total of 223 students aged 17 to 23 years completed foreign language classroom anxiety scale (FLCAS) which measures their anxiety. Our subjects' achievement measured by two types: tests at schools and IELTS/TOFLE. Generally, high schoolers experience FL anxiety. Correlation analyses indicated the existence of inverse relationship between FL anxiety and FL performance. The correlation was stronger when students take exams at schools, and the underlying reason is that compared with IELTS/TOFLE, they cannot take tests at school many times to improve their score. Additionally, Anxiety provoking factors includes whether they can prepare the tests well or not and the times they can take tests, followed by rivalry with classmates. Results are discussed compared with previous studies and implication to FL teachers are also considered.

Keywords: FLCAS · China · high school students · foreign language anxiety · students oversea

1 Introduction

Foreign language learning is a complicated cognitive process with emotionality such as anxiety and ennui, and anxiety has been the object of constant empirical and theoretical attention for several decades [9]. Horwitz et al.'s [1, 9] research devised Foreign Language Classroom Anxiety Scale (FLCAS) and provided firm evidence that the measurement is reliable. Their research defined Foreign Language (FL) anxiety as a special situational anxiety which is composed of communication apprehension (CA), test anxiety (TA) and fear of negative evaluation (FNE).

To date, the FL theory along with FLCAS proposed by Horwitz et al. have been widely used instrument to explore experience and consequence of anxiety among adults or university students [2] and those who come from western culture backgrounds (e.g. [7]). Evidenced by three meta-analyses, the relationship between FL anxiety and academic performance has triggered scholars' interests to explore the nature of it. All three

studies revealed moderately negative correlation between FL anxiety and level of attainment. Multiple correlation coefficients are $r = -.36$, $r = -.34$ and $r = -.39$ respectively. According to these findings, they suggest that age can be a potential factor to affect relationship between FL anxiety and academic performance.

In China, there are approximately 9.04 million high school students, aged 15–19 who learn English as a foreign language each year [3]. Among all students overseas in China, the proportion of high schoolers account for 22.8%. High schoolers' proficiency, however, at a comparatively lower level, and make it difficult for them to achieve higher results in language test with higher stakes such as IELTS or TOFLE. Despite this, only a handful of research focus on understanding FL anxiety among high schoolers.

The present study therefore sought to have a deeper understanding of Chinese' prospective overseas high schoolers' FL anxiety. To be More specifically, this study aimed to (1) identify variables which may contribute to their FL anxiety, and which factor makes them most anxious and (2) examine whether the correlation between FL anxiety and FL achievement, and the anxiety levels of two types of tests (test at school or IELTS/TOFLE).

2 Literature Review

Foreign language (FL) anxiety has been an issue explored by scholars in academia for decades. Spielberger defined it as subjective feelings brought by neural system [4]. Generally, FL is state of mind with fear or tension provoked by inability for meeting expectations. FL anxiety has been grouped in the light of different reasons. The most convincing classification belongs to Horwitz et al., and they asserted that FL anxiety consists of three subcomponents which are communication apprehension (CA), test anxiety (TA), and fear of negative evaluation (FNE).

CA refers to being anxious when communicate with others. The factors contributed to CA are various, ranged from fear of speaking English to how teachers organize the class (Andrade, William, 2009) [5]. The second component is TA which is defined as the tendency to perceive consequence without good performance in an evaluative situation. Common causes of TA proposed by researchers are failure of performing well (Gürsoy, Arman, 2016) [8] and experience related to past failure of passing tests. These factors may interfere with their achievement to some extent. FNE is the apprehension of evaluation from others.

Earlier studies have examined the relationship between FL anxiety and level of attainment and delivered controversial and mixed results. Researchers attributed confounding findings to ambiguous definition of anxiety and different measurement. Horwitz et al. [9] ended the confounding phrase of how to define FL anxiety by conceptualizing FL anxiety with the instrument, FLCAS, to measure this special emotion. Their seminal research has profound effects on subsequent researchers, and many of them have proved that this scale is reliable both empirically and theoretically [5, 6]. Researchers have reached on consensus on the negative correlation between FL anxiety and achievement [2].

The moderator variables of this negative correlation, however, is still debatable. Zhang (2019) found that the proficiency of learners cannot affect anxiety-achievements significantly. In contrast, some researchers hold the opposite view [7].

Summing up these findings, negative correlation between FL anxiety and achievement was employed. However, most of subjects from supporting studies are adults, especially university or undergraduate students. Chinese researchers also choose these subjects to examine FL anxiety.

In contrast, research about high schoolers is comparatively limited. There are exceptions that examining anxiety of males and females assisted by FLCAS [3], and analysis of what factor related to FL anxiety, and relationship between their FL anxiety and FL achievement. Cui [3] invited 105 highschoolers to reveal different level of anxiety experienced by two genders, and males have more anxiety than females, they think females are more gifted. Landström (2015) studied the most anxious provoking activity for senior middle school students. Jiang (2013) found level of FL anxiety varies among high school students. However, the above studies all examined FL anxiety of subjects from state-owned school, in which English is taught in a test-oriented way, and only a few of them have experience to take international language test, such as IELTS or TOFLE.

Another factor which is worth to explore is the test for different purposes (test at school or IELTS/TOFLE). Test is of higher importance may generate special FL anxiety and thus have debilitating effects on FL performance.

3   Method

3.1   Participants

A total of 223 students took part in this study, including 120 girls and 103 boys. The mean age is 17.46, and SD is 2.489. 100 of them came from an international school in Beijing, which can represent the average level of English learning of prospective university students, and to gain data from various areas, the rest of subjects came from other provinces in mainland, China. All of them studied English as second foreign language and they all had experience of taking language tests such as TOFLE or IELTS.

3.2   Instruments

A Foreign Language Classroom Anxiety Scale (Adapted version of the FLCAS, [9]). The FLCAS consists of a 33-item, self-report 5-point Likert scale to evaluate the degree of FL anxiety. The instrument was used as a tool with minimal modification to measure anxiety specific to English learning among high schoolers in mainland China who want to finish bachelor degree in other countries. The scale was translated into Chinese before implemented to reduce the language barrier of subjects. All the words foreign language in the scale was replaced by English to clarify the questions.

FLCAS (foreign language classroom anxiety scale) was the selected mainly due to the high reliability it showed in many studies of similar field [8]. It has been used as a

reliable tool in a wide breadth of studies, from the nature of FL anxiety among university students who registered Japanese course [1, 9] to correlation between test anxiety and FL anxiety (Cakici, 2016). Additionally, revised version of FLCAS has been used to explore the FL anxiety among high school students [3, 10].

Thus, FLCAS is the optimal instrument in current context.

3.3 TOFLE and IELTS

For students from non-English countries, all of them must submit their score of language test to prove their proficiency of English, if they want to enroll in universities in English-speaking countries or areas. TOFLE and IELTS are most common language test system in mainland China. In this study, these two tests were categorized as formal tests, and their correlation with FL anxiety would be examined. To unify the data, scores are converted to percentages, the average score of involved participants was 60.52%, which means that their English level was intermediate.

3.4 Interviews

In this study, 6 students who completed the questionnaire, and 2 teachers in an international school in Beijing were involved in the interview to gain more insights into FL anxiety, and the interview was semi-structured, carrying out in a one-on-one pattern. To overcome language barriers (participants are all intermediate English learners) and elaborate their ideas, all interviewees were allowed to answer questions in Chinese.

3.5 Procedure

To protect the privacy of students, the author has toughened the stance of using the personal information, including their gender, age, and scores of IELTS or TOFLE, only for academic purposes in the questionnaire. It was launched online in the middle of May because most of schools in Beijing were carried out lockdown policies due to epidemic. 3 students and 2 teachers were interviewed to have a basic understand of students' anxiety before launching the questionnaire, and 3 highschoolers were involved to further explore their situation and feelings after filling the questionnaire (all of 6 students were respondents of the questionnaire).

4 Data Analysis

The statistics' reliability in this study has been examined, and Cronbach's Alpha coefficient reaches 0.762 (from Table 1), which means that the data is great.

The Table 2 shows that correlation test has revealed that anxiety affect both school tests and IELTS/TOFLE negatively, at −.258 and −.175, respectively.

Table 1. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.762	.789	5

Table 2. Correlations

		Age	Scores	IELTS and TOFLE	Anxiety
Age	Pearson Correlation	1	.036	.002	−.001
	Sig. (2-tailed)		.597	.973	.987
	N	223	221	223	222
Scores	Pearson Correlation	.036	1	.290**	−.258**
	Sig. (2-tailed)	.597		.000	.000
	N	221	221	221	220
IELTS and TOFLE	Pearson Correlation	.002	.290**	1	−.175**
	Sig. (2-tailed)	.973	.000		.009
	N	223	221	223	222
Anxiety	Pearson Correlation	−.001	−.258**	−.175**	1
	Sig. (2-tailed)	.987	.000	.009	
		222	222	220	222

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

5   Discussion

This study enriches the subjects that can be examined in the field of FL anxiety, and to be more specific, prospective overseas high schoolers who study in international schools are not mainstream compared with counterparts in state-owned schools. However, this group should not be ignored.

Regarding to the first question, according to the questionnaire, whether they can prepare for the class or test well can be the most significant contributor to their FL anxiety, which means that approximately half of subjects reported this can provoke their negative feelings (49.59%). On the contrast, the reverse trend was true. To be more specific, when they have prepared well for exams, their level of FL anxiety declined, which supported by the answer of no. 25 question in the FLCAS. Only 29% respondents claimed that they still felt nervous with good preparation, and the rest of them harbored the opposite view. Moreover, due to their maturity level, peer pressure was also one of the important factors which can trigger anxiety. Correlation analysis revealed that, for high schoolers, FL achievement (test at schools) has greater negative correlation with FL anxiety. According to interviewees, all of them admitted they always compared their scores at school with classmates. If they have a low score at school, they feel they are

inferior to others and this can lower their self-esteem. Some of them suffer from vicious cycles due to poor performance of FL test.

For the second research question, FL anxiety is in inverse relation to FL performance significantly. In other words, the data has proved the conspicuously negative correlation between FL anxiety and both two types of tests. What is consistent with commonsense is that their academic performance of informal tests at school is higher than that of IELTS/TOFLE, at 67.81 and 60.52%, respectively. This result is in accordance with previous studies which involved participants from different cultural contexts or age groups (e.g. Onwuegbuzie et al. 1999) [6]. Additionally, according to statistics, participants feel more FL anxiety in tests at high schools (correlation coefficient = −0.181) than in language tests (correlation coefficient = −0.264). This result is conflicted with former researcher who found higher level of anxiety at English tests with higher stake (hu et al., 2021). These confounding result can be explained due to the frequency of test which allowed to take. In hu's study, the high stake test is arranged by MOE, having more to do with their future, and students are taught according to curriculum set out by related departments. This means that it is impossible for students to have a second chance. For subjects in this study, although IELTS/TOFLE is a crucial element when it comes to applying university, they can take these exams without frequency limit, and they can decide whether the score of this test is sent to university they long to enroll in or not. So, their FL anxiety, especially test anxiety (TA), will decline significantly when they gain more test experience and skills. A student from interviews reported that "I felt not that anxious when I took IELTS exam for the third time, and for test at school, I can feel peer pressure, and the expectations from parents and teachers". From the above discussion, the times of opportunities of the test can be the determining factor of decreasing level of FL anxiety in IELTS/TOFLE.

6   Conclusion

By investigating high schoolers who will study abroad, they suffer from FL anxiety, and their most anxiety-provoking factor is the lack of preparation to tests, following by comparison with peers. Additionally, an inverse relationship between FL anxiety and FL performance has been found, and the relationship was more evident in tests at school. The underlying cause is the frequency of taking tests. Students can take IELTS/TOFLE without countless times, so they feel less anxious for this type of test. Considering the enormous number of high schoolers studying English to pursue a degree oversea in China, it is necessary for educators to do more research to understand and reduce FL anxiety so as to adopt better teaching methods and optimize curriculum.

The present study highlights educational implications. High schoolers experience great level of FL anxiety, although the subjects in the study do not have to take part in college entrance exams in China, which is extremely competitive. This negative feeling has negative effect to their both type of tests. Some students, however, reported that anxiety can facilitate them to study English well, so teachers should realize that they should help students to adjust their level of FL anxiety properly, instead of eliminating this feeling. To date, few of studies investigated facilitating anxiety, and this field is worth to explore to help students further.

To reduce FL anxiety, some methods can be adopted. More time of preparation should be given to students according to their ability. When having tests, teachers should allow students to prepare and inform them in advance to reduce their test anxiety. Also, a strong sense of equality should be formed in FL classrooms. Teachers should not treat students with different attitudes according to their scores.

Finally, it is crucial for teacher to enable students to realize that there is no rivalries between classmates, and those who don't get a high score in test are not inferior to others. Peer pressure is an issue due to the subjects' age, so scores should not be compared with others.

References

1. Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal, 78*(2), 155–168.
2. Botes, E., Dewaele, J. M., & Greiff, S. (2020). The foreign language classroom anxiety scale and academic achievement: An overview of the prevailing literature and a meta-analysis. *Journal for the Psychology of Language Learning, 2*(1), 26–56.
3. Cui, J. (2011). Research on high school students' English learning anxiety. *Journal of Language Teaching & Research, 2*(4).
4. Eysenck, M. W. (1979). Anxiety, learning, and memory: A reconceptualization. *Journal of Research in Personality, 13*(4), 363–385.
5. Ganschow, L., & Sparks, R. (1996). Anxiety about foreign language learning among high school women. *The Modern Language Journal, 80*(2), 199–212.
6. Halder, U. K. (2018). English language anxiety and academic achievement. *UGC Journal, 4*, 138–147.
7. Hewitt, E., & Stephenson, J. (2012). Foreign language anxiety and oral exam performance: A replication of Phillips's MLJ study. *The Modern Language Journal, 96*(2), 170–189.
8. Hodapp, V., & Henneberger, A. (1983). Test anxiety, study habits, and academic performance. *Advances in Test Anxiety Research, 3*, 119–127.
9. Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal, 70*(2), 125–132.
10. Horwitz, E. K., & Young, D. J. (1991). *From theory and research to classroom implications.*