

The Effects of Foreign Language Classroom Anxiety in Online English Classes on Chinese Undergraduate Students' Academic Performance During The COVID-19

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Abstract. With the intensification of the epidemic, schools around the world have begun to implement online distance learning. This paper investigates the connection between performance and students' anxiety in a foreign language online classroom. The authors collected 102 sophomore English majors' Foreign Language Classroom Anxiety Scales (FLCAS) and collected their professional grades in a certain subject and conducted relevant interviews with six students. According to studies, there is a link between student performance and anxiety in foreign language classes. At the end of this paper, the authors put forward some methods to reduce anxiety in foreign language classrooms. For example, teachers adjust teaching methods, encourage students to dare to speak, create a relaxed classroom environment, and let students dare to make mistakes. For students, they should find out the factors that cause anxiety and find a learning method that suits them. There are some deficiencies in this paper, such as the small number of researchers, etc. The authors hope to conduct further research and propose future research directions.

Keywords: Online course, FLCA, English performance, negative correlation.

1. Introduction

There are many studies focusing on Foreign Language Classroom Anxiety. Domestic and foreign scholars have carried out a wide range of studies on FLCA and foreign language enjoyment (FLE), among which the effects of FLCA on FL proficiency are diverse. FLCA has a significant impact on the cognitive level and actual level of FL proficiency of FL learners.

Anxiety is one of the negative emotional factors that block FL learning. It refers to the inability of FL learners to overcome the obstacles of FL learning or to achieve their expectations, which leads to weakening learners' self-confidence. As a result, FL learners have developed tension, worry and fear about FL learning over time. Since the 1970s, FLA has been widely concerned and deeply studied in the field of second language acquisition (SLA). Domestic and foreign scholars have different standards for the classification of FLA, among which the most representative is Horwitz, et al., who classified fear of learning a foreign language into the following three categories: communication anxiety, exam anxiety, and fear of receiving a poor grade [1]. The Foreign Language Classroom Anxiety Scale (FLCAS) was created using this information.

However, under COVID-19 in the past three years, the classroom model has undergone tremendous changes. According to some domestic scholars, FLCA includes internal factors such as FL learners' FL level and FL learners' autonomous learning behavior, external factors such as teachers' negative evaluation and classroom environment factors, and most of them focus on offline teaching [2,3]. As for the online teaching environment under the influence of COVID-19, some scholars studied 203 freshmen to junior foreign language undergraduates by means of questionnaire and interview, concluding that gender and age had little influence on FLCA, while students' self-control, online environment and academic pressure of online course were the most important factors causing FLCA (Liu, et al, 2021). The previous studies have deepened the understanding of FLCA,

which are worth being referenced. However, there still exists some gaps in the ways of solving FLCA under the influence of COVID-19 in the research.

Regarding the research topics in the current study, it was discovered that FL learners' levels of FLCA were strongly correlated with both their actual and perceived FL competence, with distinct patterns in various settings and domains.

Dewanelf and Chengchen Li (2022) argue that there were substantial correlations between FLCA, self-perceived English competency, and real English proficiency. On the relationship between self-perceived English proficiency and FLCA in particular, according to Dewaele and MacIntyre (2014), FLCA was inversely correlated with perceptions of FL proficiency [3]. Corresponding to this, Botes et al. (2020) discovered that although the impact size was small, more self-perceived proficient FL learners reported considerably lower levels of FLCA. Jiang and Dewaele (2019) showed that there is a negative association between FLCA and English proficiency level, as assessed by a typical English test that involves hearing, reading, writing, comprehension, and vocabulary tests [4]. In like manner, Wang (2022), through the distribution of FLCAS to 300 students in senior school, the collection of effective research subjects' monthly and mid-term test scores and interviews with high, middle and low-score students, came to the following conclusions: High school students' anxiety in foreign language classroom was caused by communication [5]. And there was a negative correlation between FLCA and academic performance. The previous studies have insights into FLCA, however, there is still a lack of FLCA research on the presence of online courses in students in the context of COVID-19. So, under the online teaching mode, what is the current situation of students' classroom anxiety and whether the factors of anxiety have changed? The research on how online education influence FLCA is almost scarce recently. Therefore, in this study, the relationship between FLCA and the performance of Chinese FL learners in the context of COVID-19 will be discussed.

2. Research Design

2.1. Research Question

This study's objective is to investigate foreign language anxiety and its influencing factors among Chinese college students. Regarding this overall goal, this study mainly answers the following three questions: 1) To what degree do the students feel anxiety in English online classroom learning? 2) What connection exists between students' English proficiency in an online course and their level of anxiety? 3) What are the factors that affect students' English classroom anxiety?

2.2. Participants

In this study, data will be collected mainly from a random sample of the undergraduate university in China. The subjects are mainly undergraduates from the same university. These subjects include English majors. A total of 69 questionnaires are expected to be distributed and the proportion of males and females is about 50%.

2.3. Instruments

The authors use demographic information, FLCAS scales, and semi-structured interviews to study the subjects. Firstly, in demographic information, there are six questions set about the gender, age, grade, school, major and TEM-4 score of the subjects. TEM-4 examines three kinds of abilities, listening, reading, and writing. (Perfect score is 100 points.) 30 points were assigned to the listening component, 50 points were assigned to the reading component and 20 points were assigned to the writing component. Secondly, in FLCAS, the group keep all the original 33 questions and supplemented some questions about FLC and FL tests. Besides, in order to fit the situations under COVID-19, the authors add the premise of the question, "carrying out online foreign language classes" and "in online foreign language classes". The questionnaire is sent out on around January 15th through the Questionnaire Star. Thirdly, semi-structured interviews were conducted with those who were willing to be interviewed. The questions are set as follows: 1) Do you feel anxious in the online

classroom, why? 2) If you feel anxious, do you think it is possible to reduce anxiety in the online classroom and how will you reduce anxiety? Researchers utilized descriptive and inferential statistics, such as mean, standard deviation, means comparison, analysis of variance, chi-square test, and regression analysis through SPSS, to statistically analyze the data.

2.4. Possible Results

It is expected that foreign language classroom anxiety in online English classes and the academic performance of Chinese undergraduate students are negatively correlated.

3. Result

The final scores of 129 sophomores with English major in the second semester of the first year were collected. 102 questionnaires were distributed, and six of them were interviewed. In the study of FLCA under the influence of the COVID-19 pandemic, the FLCAS was used to conduct a questionnaire survey of sophomore students in a provincial comprehensive university. 102 surveys in all were given out, with 46% of male students and 54% of female students. A total of 68 questionnaire responses were obtained after invalid ones were eliminated, yielding an effective questionnaire rate of 66.66%.

Table 1: Cronbach Reliability Analysis

Project	Sample Size
33	68

Table 1 showed that the reliability value of the coefficient was 0.845, which was higher than 0.8 and indicated that the research data's reliability was of a high caliber. The validity of the method was examined using KMO and Bartlett's tests [6]. Also, the study data were very suited for information extraction and the KMO value was 0.905, which all together suggested that the data's reliability was of excellent quality and that it could be used for further analysis [7].

4. Discussion

The mean and standard deviation for each item and dimension in the FLCAS were computed using descriptive statistics in SPSS after the data had been sorted. Higher scores correspond to higher FLCA levels, and vice versa. Oxford and Burry-FLCAS Stock's categorization standards classify high degree anxiety as having a mean value of 3.5 or higher, medium degree anxiety as having a mean value between 2.5 and 3.4, and low degree anxiety as having a mean value of 2.4 or less [8].

4.1. Factor Analysis of the FLCAS in This Questionnaire

The FLCAS scale scored a 0.905 on the Kaiser-Meyer-Olkin (KMO) test, indicating a good level of validity for the scale.

To determine the appropriate link between the factor and the research item, the results of this study are rotated by varimax [9]. The authors can observe from Table 1 that there is a clear connection between the study variables and factors, indicating that the information can be efficiently extracted, and that the common values of all studies are all higher than 0.4.

Fear of Subpar Performance in the Foreign Language Classroom (FLCAS1, 39.59% variance) and Lack of Confidence towards the Online Foreign Language Classroom (FLCAS2, 66.26% variation) were found to be the two factors that best explained the FLCAS's overall variance of approximately 66.26%. Table 2 below displays the results of the factor analysis of the FLCAS questionnaire in this study.

Table 2: Factor analysis of the FLCAS.

Question	flcas1	flcas2
Q7	0.886	
Q9	0.811	
Q10	0.743	
Q15	0.673	
Q16	0.762	
Q18	0.803	
Q19	0.720	
Q21	0.716	
Q22	0.799	
Q23	0.778	
Q25	0.790	
Q26	0.811	
Q27	0.715	
Q30	0.705	
Q31	0.767	
Q32	0.658	
Q33	0.780	
Q35	0.712	
Q36	0.775	
Q37	0.829	
Q39	0.791	
Q8		0.759
Q11		0.808
Q12		0.738
Q13		0.854
Q14		0.705
Q17		0.762
Q20		0.829
Q24		0.776
Q28		0.771
Q29		0.793
Q34		0.797
Q38		0.888
% of variable	39.59%	26.67%
% of total	66.26%	
variance		

According to Table 2, the first factor of the FLCAS (FLCAS1) means “Fear of Inadequate Performance in the Foreign Language Classroom” including Questions 7, 9, 10, 15, 16, 18, 19, 21, 23, 25, 26, 27, 30, 31, 32, 33, 35, 36, 37, and 39 was cited from Tóth (2008) [10]. The second factor, FLCAS2, includes Questions 8, 11, 12, 13, 14, 17, 20, 24, 28, 29, 34, and 38 in this questionnaire. They were named according to the context of the situation.

4.2. Correlation Analysis of the FLCAS in This Questionnaire

The association between English test results and Q7-Q39 is investigated using correlation analysis, and the Pearson correlation coefficient is utilized to quantify the strength of the correlation [11]. The specific analysis shows that:

“Q6: What is your comprehensive English score in the first semester?” The correlation value between Q33 and “Q33: speaking English in foreign language class will feel nervous and confused” is -0.244, which shows that there is a significant negative correlation between them.

The correlation values between “Q6: What is your comprehensive English score in the first semester?” and “Q11: no matter how many English classes I take, I don’t feel bothered”, “Q14: when conducting online foreign language classes, I feel relaxed about some quizzes in foreign language class”, “Q24: speaking confidently in foreign language class in online class”, “Q29: in online foreign language class, I think other students speak English better than me”, “Q38: feel at ease with foreigners” were 0.268, 0.276, 0.253, 0.275, 0.299, respectively, and p were 0.027, 0.023, 0.038, 0.023, 0.013, respectively). As a result, Q11, 14, 24, 29, and 38 have a very strong positive association with English performance.

From the aspect of practical significance, the design of empirical research and the analysis of the predicted results, it is suggested that students should face up to their anxiety level in the online foreign language classroom, so as to take appropriate measures to enhance their learning motivation and self-confidence and reduce the degree of FLCA. For teachers, it is recommended to mobilize students’ learning enthusiasm, appease students’ emotions during COVID-19, and guide students to adjust their learning methods and other measures to alleviate students’ anxiety in online foreign language classrooms.

5. Implications

This study investigates the level of anxiety experienced by students enrolled in online foreign language courses against the backdrop of COVID-19, which offers helpful data and information for online college English teaching and has significant guiding and reference implications for the teaching of foreign languages. According to the experimental results, the authors found that the more nervous and confused they feel when speaking English in class, the lower their English scores. In addition, the authors also found that for a large number of English classes, the less students feel troubled, the better their grades; in online foreign language classes, the more relaxed they feel about the quizzes in class, the higher their English scores; in online classes, the more confident they are in speaking in foreign language classes, the better their English scores; in online foreign language classes, students who believe that others’ English is superior than their own are more proficient. In addition, students who feel more at ease with foreigners do better in English.

Thus, this study has the following implications for relieving anxiety in the online English classroom: First of all, students should appropriately adjust their learning methods. They can understand their own foreign language anxiety problems by learning related theories of FLA, and then implement suitable coping techniques to improve their learning motivation and self-assurance. High levels of self-confidence can lower learners’ levels of foreign language anxiety and encourage them to work hard at their studies. Secondly, to decrease classroom anxiety, teachers can encourage students’ excitement for learning, increase their own enthusiasm for class involvement, and make students pleased to study. Besides, they are also expected to communicate with students in time after class to ease students’ psychological anxiety caused by COVID-19.

6. Conclusion

There are some limitations in this study. First, the subjects were dispersed unevenly, and the sample size was modest with the majority of the Changchun University sophomore English majors. The coverage of research subjects will hopefully be steadily increased by follow-up investigations, and the research findings will become more representative. Second, because of time and resource constraints, dynamic tracking research was unable to be conducted to examine FLCA changes among college students, and the samples of final scores from the first year’s second semester that were gathered were not as reliable or accurate as TEM-4 or IELTS scores. Moreover, there was a single

research method used for this study. Structured interviews are also vulnerable to bias. In the future, it is planned that a range of productive research techniques, including discourse analysis, case study analysis, video recording and interview analysis, would be used in research projects.

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