

Correlational Study of Foreign Language Anxiety and Speaking Performance: A study of students in Chong Qing University

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ABSTRACT

This dissertation aimed to investigate the foreign language anxiety (FLA) experienced by sophomore students at Chong Qing University in China. A mixed method was used to collect quantitative and qualitative data, with 20 students participating in the quantitative study and four students in the qualitative study. Data were collected through questionnaires and semi-structured interviews, analyzed quantitatively using SPSS descriptive statistics and analytically using thematic analysis of the data from the semi-structured interviews. The findings showed that FLA was prevalent among the students surveyed at Chongqing University and that the higher the level of foreign language anxiety, the worse the speaking performance. In addition, it was suggested that the causes of students' foreign language anxiety came from several sources, including the setting of the test, the examiners' identity, and the students' personalities. Moreover, the collaborative activity as an approach to reduce was shown to be not very effective in reducing foreign language anxiety. The findings and discussions of this dissertation provide data for teachers and institutions to learn about the causes for Chinese university students' FLA, meanwhile potentially informing the design of their future English speaking class

KEYWORDS

foreign language anxiety; Speaking Performance; Chong Qing University

1 Introduction

In the context of globalization, the demand for English language professionals has surged, leading to extensive studies in English language education. Rose (2019) highlights that English has become a global tool, with job seekers, particularly university graduates, expected to possess English skills to enhance their competitiveness.

This research aims to understand the current state of foreign language anxiety (FLA) among Chinese university students, specifically examining the association between FLA and speaking performance, identifying its causes, and exploring potential solutions. While much research has focused on improving speaking instruction, few studies have addressed the psychological impact of anxiety on speaking proficiency or students' perceptions of contributing factors and solutions to FLA.

The rationale for this investigation stems from previous studies, such as Wang (2015), which indicate that anxiety affects speaking performance due to factors like fear of negative evaluation and insufficient language knowledge. Additionally, this dissertation explores whether current teaching methods, particularly collaborative activities, can help reduce students' anxiety. The research employs interviews, questionnaires, and both quantitative and qualitative data collection

to examine these issues.

2 Literature Review

2.1 Foreign language anxiety

When anxiety is directly related to foreign language learning process, it is termed foreign language anxiety (FLA) (Horwitz, 2001, as cited in Kráľová, 2016). FLA was first proposed in the affective hypothesis. Krashen (1981) initially proposed language acquisition anxiety in 1981 in his theory of effect, in which he stated that the affective components that impact second language learning include motivation, self-confidence, and responsibility anxiety. FLA is recognized as a sense of worry and trepidation that arises throughout the process of learning and performing a foreign language. In other words, it is the feeling of fear and concern when speaking a foreign language.

2.2 Classification of anxiety and FLA

Traditionally, psychologists distinguished three forms of anxiety: trait anxiety, state anxiety, and situation-specific anxiety. First, trait anxiety is a more persistent tendency to feel worried (Scovel, 1978). Second, state anxiety is a brief fearful reaction to a specific anxiety-inducing event, such as a pop quiz (Spielberger, 1983). It is worth noting that state anxiety and trait anxiety are tightly connected. Individuals who have a high level of trait anxiety are more likely to have a severe form of state anxiety (Spielberger, 1983). Third, scenario-specific anxiety is induced by a specific situation or event, such as delivering a speech or main in a public place (MacIntyre& Gardner, 1994).

2.3 Effect of anxiety

It is generally accepted in academia that FLA has both positive and negative effects on language learning. On the one hand, Aida (1994) argues that FLA has a negative relationship with language performance and that FLA is debilitating anxiety. These negative effects are reflected in the possibility of ineffective language learning and physical and psychological discomfort, and abandonment of learning.

On the other hand, Brown (2000) argues that FLA can also be facilitative - FLA can facilitate learners' efforts to learn more, and FLA can also have implications for teaching foreign language teachers.

2.4 Research questions

Firstly, since Young's (1991) study found that anxiety negatively impacts speaking performance among French and German majors, I aimed to determine if similar results would apply to non-English majors at Chongqing University, leading to my first research question. Secondly, building on the work of scholars like Bourhis (1977) and Bila (2013), I sought to interview students to understand their perceptions of the causes of their anxiety, including potential factors not addressed in previous studies, which formed my second research question. Lastly, Ansari (2015) suggested that increasing motivation through cooperative activities can effectively alleviate FLA. This approach allows students to practice speaking English in a low-pressure environment with familiar peers, as they engage in group and pair learning without the stress of delivering speeches or being evaluated by the teacher.

Therefore, the research questions for this dissertation are as follows.

1. Is there a correlation between students' FLA and their speaking performance?

(A hypothesis of research question 1 is that: there exists a negative correlation between students' FLA and their speaking performance).

2. What are the influencing factors that may cause speaking anxiety?
3. How do students perceive cooperative activities in reducing their anxiety?

3 Research Method

3.1 Methodological approach

This study aims to explore the relationship between Foreign Language Anxiety (FLA) and speaking performance among Chinese university students learning English, as well as the potential causes of FLA. According to Heath (2018), correlation studies examine the relationships between two or more variables, and since FLA is closely linked to speaking performance, this method is appropriate.

Instruments Used: A questionnaire was administered to assess participants' levels of FLA and their spoken English performance, allowing for analysis of the relationship between the two.

Qualitative Data Collection: Semi-structured interviews were conducted to gather insights on factors contributing to FLA, focusing on personality traits, exam formats, and teaching methods.

Data Analysis: The study calculated participants' questionnaire scores and matched them with their IELTS speaking test results to analyze correlations. Additionally, interviews provided qualitative data on students' perceptions of the causes of FLA and their attitudes toward peer activities as a proposed solution.

3.2 Describe Data Collection Methods

3.2.1 Participants

This research aimed to recruit 50 students from Chongqing University in China using four selection criteria: participants could not major in English-related subjects, must be sophomores, should allocate at least 30 minutes for the questionnaire, and must possess a valid IELTS score. Potential participants were contacted via a WeChat post and encouraged to invite peers through a snowball sampling strategy. However, only 20 participants were recruited due to time and location constraints. The response period was limited to five days, yielding only 30 responses. After screening, 5 were excluded for not being sophomores or majoring in English, 3 had invalid contact information, and 2 lacked valid IELTS scores, resulting in 20 valid respondents.

3.2.2 Questionnaire

A modified questionnaire was used to examine Foreign Language Anxiety (FLA) and its causes among Chinese college students learning English. It consists of two sections: personal data and the Foreign Language Oral Performance Anxiety Scale (FLOPAS).

Participants first provided personal information, including their name, age, gender, and IELTS speaking score, and indicated whether they saw themselves as extroverted or introverted. They then completed a 30-item FLOPAS, which was adapted from the FLA Classroom Scale (FLACS) by Horwitz (1986). This scale uses a five-point Likert scale, with total scores ranging from 30 to 150. Participants were categorized into three anxiety groups based on their scores: high anxiety (9 participants scoring 112 or more), medium anxiety (6 participants scoring between 87 and 112), and low anxiety (5 participants scoring below 87).

The FLACS was modified to better reflect the Chinese context, including questions about local

English proficiency tests and removing items related to anxiety about communicating with native speakers. The number of questions was reduced from 33 to 30, and the questionnaire was translated into Chinese to improve clarity and participation.

3.2.3 Speaking Performance

In this research, speaking performance was assessed using participants' IELTS speaking scores, chosen for their efficiency and accuracy in reflecting speaking abilities. Most Chinese candidates score between 5 and 6, indicating they can converse fluently but often make basic vocabulary and grammar errors.

3.2.4 Semi-structured interview

To explore what specific factors may contribute to FLA among Chinese university students, this study will also collect feedback from students through Semi-structured Interviews.

The interview was conducted with four participants, all from the 20 people who took the questionnaire above and met the condition that they all had a high level of FLA. The 4 participants were divided into two groups, two for the introvert and extrovert personality groups. The 4 participants were interviewed in a one-to-one online session through the zoom meeting software. The semi-structured interview lasted approximately 10-15 minutes and involved questions on three areas: the contributing factors to FLA; the impact of personality on FLA; the influence of cooperative activities on reducing FLA.

3.3 Describe analysis method

3.3.1 Correlational study (SPSS)

This research used SPSS (Version 26) to analyze the correlation between students' Foreign Language Anxiety (FLA) and their speaking performance. A total of 20 valid questionnaires were collected, coded, and their FLA scores calculated. These scores, along with the participants' IELTS speaking scores, were input into SPSS to compute the correlation coefficient.

The p-value was assessed to evaluate the null and alternative hypotheses; a linear association was found when $p < 0.05$, while $p > 0.05$ indicated no correlation. The correlation coefficient ranges from -1 to +1: a value close to +1 indicates a positive correlation (higher FLA linked to higher IELTS scores), while a value near -1 indicates a negative correlation (higher FLA associated with lower IELTS scores). A coefficient close to 0 suggests no relationship between FLA and IELTS scores.

3.3.2 Thematic analysis

This research uses thematic analysis to analyse student feedback collected from semi-structured interviews. Thematic analysis can be done in a variety of ways, but the most popular method involves six phases : familiarisation, coding, generating themes, evaluating themes, defining and labeling themes, and writing up (Braun & Clarke, 2012).

Before the interviews began, both the researcher and participants had some knowledge of the research topic and potential questions. The interviews were recorded via Zoom, and notes were taken during the sessions. The researcher then coded the interviews, summarizing students' responses into short sentences. Based on these codes, broader themes were proposed to accurately capture the content. The researcher reviewed these themes for accuracy and clarity, making necessary corrections. Each theme was then named and explained to clarify its meaning and relevance to the data. Finally, the researcher described how the findings addressed research

questions 2 and 3.

3.4 Data analysis

This dissertation uses a mixture of quantitative and qualitative research methods and the data analysis for each of the two research methods is described below.

3.4.1 Quantitative data analysis

The quantitative analysis of this study was carried out using statistical data collected from the questionnaire. To facilitate the administration of the data, I numbered all participants according to a serial number from 1-20. I then calculated the scores for each questionnaire and collated them into a table, and entered the data into the Statistical Package for Social Sciences (SPSS 26), which was used to perform the calculations. FLACS scale scores and IELTS speaking scores of 20 participants were finally integrated and collected.

The descriptive statistical analysis results showed that the average FLA score for all students was 105.5, and the average IELTS speaking score was 5.88.

The students were divided into high anxiety, medium, and low anxiety groups according to their FLA scale scores. The low anxiety group, consisting of 5 candidates, had a mean score of 74 on the FLA scale and a mean IELTS speaking score of 6.8.

The medium anxiety group, with 6 participants, had a mean score of 96.33 on the FLA scale and a mean IELTS speaking score of 6.

The high anxiety group, consisting of 9 respondents, had a mean score of 129.11 on the FLA scale and a mean IELTS speaking score of 5.28.

The correlation between FLACS scores and speaking performance scores was analyzed using SPSS software. The p-value tested the null and alternative hypotheses, indicating a linear correlation when $p \leq 0.05$ and a significant correlation when $p > 0.05$. In this research, a p-value of <0.001 demonstrated a very significant linear relationship between FLACS scores and oral performance scores.

The r-value, representing the correlation coefficient, ranges from -1 to 1; an r-value of 1 indicates a perfect positive correlation, values between 0 and 1 show that both variables increase or decrease together, an r-value of 0 indicates no correlation, and values from -1 to 0 indicate a negative correlation, with -1 representing a perfect negative correlation.

3.4.2 Qualitative data analysis

The qualitative data came mainly from semi-structured interviews to answer RQ 2 and RQ 3. Students were interviewed to find out what caused their anxiety and whether peer collaboration as an approach helped them to alleviate their FLA.

The 4 participants who took part in the interviews were selected based on the following criteria: The participants who took part in the interviews were selected from the 20 participants who had taken part in the questionnaire mentioned above, and their common characteristic was that they were all experiencing very high levels of FLA.

The semi-structured interviews for this study focused on the following questions to be asked of participants :

- 1.What are the influencing factors that may cause speaking anxiety?
2. How do you think of cooperative activities? Has this method helped you to reduce your FLA?
3. Can you think of any other solutions that is better than this one to your FLA?

For questions 1 and 2 in the semi-structured interviews, the research in this dissertation used a

thematic analysis approach, following 6 phases proposed by Clark and Braun (2006).

The specific steps of the thematic analysis method in this dissertation are as follows:

(1) Phase 1: familiarizing yourself with your data

(2) Phase 2: generating initial coding

(3) Phase 3: searching for themes.

Potential themes were identified through the collation of the initial codes born in Phase 2. All relevant code coding data was collated into the final identified themes.

The potential themes perceived by the participants were twofold: on the one hand, they came from the participants themselves, such as social fears or feeling uncomfortable in the examination situation. On the other hand, it came from the examiners, whose looks and speaking style also made them feel anxious.

(4) Phase 4: reviewing themes.

The point of conducting this phase is to merge potential themes that could become the same and to discard some repetitive or unnecessary themes so that the final theme is accurate and meaningful.

Setting of the test: Candidates are asked to complete tasks that are beyond their English skills.

Candidates may be uncomfortable with the environment.

Interlocutor's identity: The examiners' looks make candidates nervous.

The examiner's speaking style is difficult for candidates to adapt to.

Fear of negative: feedback Candidates fear negative feedback from teachers, peers, or examiners.

Candidate's personality: Introverted personality with social phobia.

The opinions of the cooperative activitie participants were divided into three categories:

Favourable: Encourages candidates to speak more actively.

Unfavourable: Waste of time; Inefficient.

Neutral: Depends on the ability of teammates; not much of a feeler

(5) Phase 5: Defining and naming themes.

The purpose of this phase was to define and name the themes, using the themes identified in phase 4 as a guide to the final identification and definition of 4 themes.

(6) Phase 6: producing the reports.

The final phase of the thematic analysis is the need to carry out a final analysis of the themes identified and defined in phase 5 and to write paragraph reports for each theme.

4 Results

The data analysis in the previous chapter shows how the three research questions were studied, and the results obtained from the study are presented in the following chapter separately.

4.1 Negative correlation

The mean score on the Foreign Language Anxiety Classroom Scale (FLACS) for the 20 students was 105.5. Participants were categorized by anxiety levels: 9 in the high anxiety group (scores above 112), 6 in the medium anxiety group (scores between 87 and 112), and 5 in the low anxiety group (scores below 87), resulting in an overall average classified as medium anxiety.

These findings indicate that Foreign Language Anxiety (FLA) is prevalent among Chongqing University students, with nearly half experiencing high anxiety levels that negatively impact their IELTS speaking performance.

Research question 1 examined the correlation between FLA and speaking performance, analyzed using SPSS, as detailed in Table 1.

Table 1 Correlation between FLA scores and IELTS speaking scores

Correlations			
		FLA Score	IELTS Speaking Score
FLA Score	Pearson Correlation	1	-.970***
	Sig. (2-tailed)		.000
	N	20	20
IELTS Speaking Score	Pearson Correlation	-.970***	1
	Sig. (2-tailed)	.000	
	N	20	20

***. Correlation is significant at the 0.001 level (2-tailed).

In this study, the r-value for FLACS scores and speaking performance scores was -0.97, with a p-value of <0.001, indicating a negative correlation between the two, meaning that higher FLACS scores were associated with lower speaking scores. This data suggest that the higher the level the speaking anxiety is, the more difficult it would be for the students participating in the study to perform well on the speaking test.

4.2 Influencing factors

For RQ 2, several themes and definitions were derived from the data analysis phase 5 as summarized in the table below.

Setting of the test: The difficulty of the test is not set at a reasonable level and the test environment is uncomfortable for students

Interlocutor's identity Students': innate fear and anxiety caused by their interlocutor as examiners.

Fear of negative feedback Students: fear for ridicule, verbal abuse and discrimination for poor performance.

Candidate's personality: Candidates have their own social fears, and their introverted personalities can have a negative effect on their oral abilities

4.3 Students' perceptions

Research Question Three consisted of two questions: how students perceive cooperative activities and how this approach has helped students to reduce FLA levels. The six stages of the thematic analysis mentioned above were also followed. Finally, the following themes were identified.

Favourable: The method helps to reduce anxiety levels and spoken language performance.

Unfavourable: The method is not very useful in reducing anxiety levels and spoken language performance.

Neutral: It remains to be seen whether the method is useful

4.4 Other possible methods

The responses of the four interviewees are summarised below.

Participant 1 (introvert) Perceived the online speaking test as social phobia friendly.

Participant 2 (introvert) Believed that schools or teaching organisations should provide opportunities to practise speaking, e.g. by organising English clubs or speech competitions. Create a relaxed learning environment

Participant 3 (Extrovert) Believed that students need to improve their English proficiency Improvement in speaking proficiency also affects listening, reading and writing skills.

Participant 4 (extrovert) thought that the difficulty of the speaking test should be lowered and

students should be given enough time to prepare. Ensure students can perform at their best.

5 Discussion

5.1 Negative correlation

The correlational analysis results support Horwitz's (1986) findings that students' speaking levels are negatively correlated with Foreign Language Anxiety (FLA). This study contradicts Razak et al. (2017), which suggested anxiety does not impact academic performance, reaffirming Horwitz's theory. It also shows that higher FLA levels among Chinese university students can hinder their ability to achieve desired oral scores.

5.2 Factors

Two respondents indicated that the identity of the examiner heightened their anxiety during the speaking test, aligning with Bourhis' (1977) findings that individuals may feel inferior when interacting with those of higher status. Many students are uncomfortable speaking to native English-speaking examiners, partly due to the lack of opportunities for informal conversations with foreigners in Chinese universities, which exacerbates their anxiety. Additionally, traditional teaching methods can make students feel overlooked.

Interview results revealed that the exam setup also contributed to their Foreign Language Anxiety (FLA), with many participants finding the speaking test content too challenging and dull, echoing Zhang's (2007) concerns about repetitive speaking exercises. Some students preferred the more relaxed format of online exams.

Furthermore, respondents expressed that fear of negative feedback from peers, teachers, and parents significantly contributed to their oral anxiety, supporting the notion that criticism fuels FLA, as noted by Amoah and Yeboah (2021) and Bilá (2013). Excessive parental focus on grades further discourages practice.

Lastly, personality traits influence FLA, with introverted respondents experiencing higher levels of anxiety and physiological symptoms like tachycardia, supporting Cheng's (1997) findings. This underscores the need for tailored approaches to support students with different personalities and encourage introverted students to participate more in classroom activities.

5.3 Strategies to reduce FLA

The approach to cooperative activities should be refined to better meet students' needs by clearly introducing tasks, selecting engaging topics, and ensuring all students, especially introverts, participate in small group discussions, fostering a relaxed environment for expression and feedback. Additionally, positive reinforcement from teachers can enhance students' emotions, while criticism may increase anxiety; therefore, teachers should use encouraging language, allow pauses for reflection, and recognize progress. Finally, language examination institutions should innovate both content and format to align with students' proficiency levels, create a comfortable testing environment, and consider a mix of online and offline exams to improve accessibility.

6 Limitations and suggestion for possible further research

6.1 Limitations

Firstly, the requirement that participants had taken the IELTS speaking test within the last two

years and achieved a valid score resulted in a smaller than expected participant pool, with only four students ultimately involved in the qualitative interviews. This small sample size may limit the representativeness of the findings, although the methodology is still valid for future research.

Secondly, while the IELTS Speaking Test has a well-established scoring system, a student's performance in this context may not fully represent their abilities in other situations.

Finally, the participants were exclusively from Chongqing University, with scores between 100-120 on university entrance exams, which may restrict the generalizability of the findings to all Chinese students learning English as a second language.

6.2 Suggestion for possible further research

This dissertation presents several suggestions for future research. Firstly, while it focused on the impact of Foreign Language Anxiety (FLA) on speaking performance, it did not address listening, reading, and writing skills; future studies could explore FLA's effects on these areas. Secondly, as English teaching evolves with technology, strategies for improving language learning should be updated to better reduce student anxiety. Lastly, the study did not investigate gender differences due to the small participant pool, so future research could examine potential variations in FLA levels and contributing factors between male and female students.

7 Conclusion

This study investigated the FLA levels of students from Chong Qing University in China and their oral performance. The study's results revealed a significant negative correlation between FLA levels and oral performance. Furthermore, conclusions were drawn from interviews with students that the possible causes of FLA levels among Chinese university students were focused on the difficulty of the examination, interlocutor's identity, fear of negative feedback, and the student's personality. A survey of whether the collaborative teaching method currently used at Chong Qing University effectively alleviates FLA revealed that most students did not see much benefit from this method. Therefore, it is the responsibility of future teachers and teaching institutions to seek innovative methods to aid students in relieving their FLA levels and to test this effectiveness. The significance of identifying foreign language anxiety is to call the teacher's attention to the emotional state of the students and to take adequate measures to reduce the debilitating effect of anxiety on language learning. Exploring the causes of anxiety and measures to alleviate it can help teachers rearrange their teaching procedures to help students overcome their feelings of apprehension and improve their speaking skills.

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