

Effects of Foreign Language Classroom Anxiety on French Majors' Language Achievement in COVID-19

Jingyi Wang^(⊠)

Faculty of French and Francophone Studies, Beijing Foreign Studies University, Beijing 100089,
China
19050002@bfsu.edu.cn

Abstract. As there have been few studies on learning anxiety in online foreign language courses, especially in minor languages, this study, therefore, employed both qualitative and quantitative research methods to survey a total of 109 French undergraduates from 16 universities. Statistical analysis was conducted to explore the levels, sources of foreign language classroom anxiety (FLCA) as well as the impacts on academic performance in the COVID-19 context from the French majors' perspective. Results of this study indicated that anxiety in French online classes was common among French majors, mainly due to students' own incompetence, fear of negative evaluation, and disadvantages of online teaching and other factors, which also had several specific negative effects on students' learning. The findings of the study can be applied as a reference for exploring the foreign language anxiety of Chinese French learners and for foreign language teaching practices.

Keywords: Chinese French learners · FLCA · Language Achievement · COVID-19

1 Introduction

In second language acquisition (SLA), anxiety is widely regarded as one of the most important emotional factors affecting foreign language learning. Foreign language classroom anxiety is even the factor with the highest anxiety value in foreign language learning at university [1]. However, in the context of COVID-19, online teaching has become the mainstream of university teaching. It differs from traditional classroom teaching in which teachers send basic learning materials to students in electronic form before class for independent study, while in-class students are asked to discuss advanced questions and assignments that allow for the development of critical thinking. Through searching and reading a great amount of literature, it was discovered that relatively few researches have been conducted on language anxiety in online university foreign language courses.

Furthermore, there are an increasing amount of researches who explore the relationship between FLCA and language performance in China, but these studies are mostly limited in terms of the target language such as English. The major education of minor languages in universities is the main way to cultivate high-level minor language talents. Students of such majors are mostly adult learners with extensive experience in English. They learn minor languages from scratch and they need to reach a high level of proficiency within four years. Therefore, attention must be paid to the level and causes of FLCA among this group.

2 Literature Review

According to MacIntyre, language anxiety (LA) is "the unease and adverse emotional response aroused during the process of learning or using a second language." [2]. It is a largely observed phenomenon in situations in which formal learning of foreign language takes place [3]. Generally, in the environment of a classroom. Language anxiety observed in the context of a classroom is termed foreign language classroom anxiety (FLCA). Previous researches have shown that the anxiety and discomfort in language classes can be identified by a series of psychological symptoms such as getting panic, forgetting things already learned or simply refusing to perform or to learn" [4]. In consequence, it is evident that FLCA can cause important effects on foreign language learners' performance in class and in tests, thereby influencing their language achievement.

In 2020, in order to control the pandemic caused by COVID-19, the Ministry of Education in China launched several emergency policies encouraging Chinese schools and universities to provide online education instead of offline courses [5], and a large portion of teaching activities have been organized via the Internet. Although online education creates larger flexibility in learning and teaching [6], some studies showed that this mode of education cannot free foreign language learners from FLCA. For example, the research of Kaisar and Chowdhury illustrated that most language learners felt more anxious and nervous in technology-based virtual classrooms than in offline classrooms. The participants attributed their anxiety to different reasons like fear of network problems, fear of being isolated, lack of opportunities to practice the language, etc. [7].

Related studies of FLCA mostly adopted a scientific and precise quantitative approach and researchers have developed scales from different theories and needs. For instance, the existing scales in this domain are the French Class Anxiety Scale (FCAS) developed by Gardner, the Anxiety State scale invented by Charles D. Spielberger, and the Language Class Discomfort scale by Ely, etc. The Foreign Language Classroom Anxiety scale (FLCAS) developed by Horwitz, Horwitz and Cope is the most generally used, accompanied with other qualitative methods including interviews, journals and observations.

The FLCAS, in order to assess communication apprehension, test anxiety and fear of negative evaluation related with FLCA, measures "students' anxiety levels in foreign language classrooms" [8]. The scale has shown strong reliability and has initiated a large amount of research on FLCA [9–11]. The researchers have successively found that anxiety is a normal phenomenon experienced by many foreign language learners, and that anxiety, may interact with other factors namely gender, grade levels, attitudes, confidence, motivation, learning achievements, teaching methods, and to have significant correlations with course grades [12–19]. For instance, a study of Gardner, Smythe,

Clement and Gliksman found that as the students attended higher grade level, the class-room anxiety correlated more with their learning achievements [20]. In addition, Liu and Chen investigated 212 learners in a Taiwan elementary EFL context and found that language learning strategy has also a strong negative impact on students' foreign language anxiety [21].

The feeling of anxiety can give rise to a great amount of difficulties in the acquisition, assimilation and production of the language which finally has an impact on their language achievements and outcomes, as compared to their more relaxed peers [22–24]. However, anxiety plays at the same time a stimulant role on language learner in addition to its negative effects. Many researches in this domain have proved that a low level of anxiety has a direct incentive effect and then people will work hard for fear of failure. For example, Bailey analysed the diary she kept in her low-level French as a FL reading class, and despite the initial discomfort and extreme fear she felt during the learning process, this foreign language anxiety also motivated her to work harder to avoid failing publicly [25].

To summarize, a review of the literature clearly shows that FLA is one of the most important factors that significantly influences FLA, and this effect varies with the level of anxiety. However, foreign language classroom anxiety has different degrees in different language learning, and learners' feelings of anxiety vary across language skills. Also, the context of online learning caused by COVID-19 creates new factors which arises the feeling of anxiety to influence the learners' language outcomes.

3 Research Design

3.1 Research Questions

- (1) What are the levels of French classroom anxiety among French undergraduates?
- (2) What are the specific reasons for the formation of anxiety in the French online classroom?
- (3) What is the impact of French classroom anxiety on language achievement? What specific effects does it have on students' learning?

3.2 Participants

The participants in this study were sophomore to senior students of French Major (n = 109) in 16 Chinese universities, which include 19 males and 90 females, accounting for 17.4% and 82.6% respectively. Since the outbreak of the COVID-19 pandemic, all these students have taken French online classes through platforms such as Zoom and the Tencent Meeting.

3.3 Instruments

With the aim of providing objective and effective answers to the research questions, the questionnaire and the interview are adopted as the main research instruments for this study.

The questionnaire for this study consists of two major parts. First is basic information about the participants, including the name of their university, grade, gender, and self-rated scores of overall French language skills. The second part is the French Classroom Anxiety Scale, adapted from the Foreign Language Classroom Anxiety Scale designed by Horwitz et al. The "foreign language" in the FLCAS is replaced with "French". After the exploratory factor analysis, the dimensions of the questionnaire are identified as "communication apprehension", "test anxiety" and "fear of negative evaluation", high reliability and validity of each dimension are proved.

Then, among the participants who were willing to accept follow-up interviews and left their contact information, according to the performance of answering open questions, the authors selected 10 as interviewers. The questions of interview in this study mainly focus on anxiety, influencing factors, influencing methods and specific experiences of French online courses.

3.4 Data Collection and Analysis

A total of 137 questionnaires were recovered, of which 109 were valid, with an effective rate of 79.6%. The data were analyzed by SPSS 26.0. Firstly, descriptive analysis was utilized to describe and analyze the levels of students' French online classroom anxiety. Secondly, linear regression analysis was carried out to analyze the impacts of French classroom anxiety on language achievement from three dimensions, namely communication apprehension, test anxiety, and fear of negative evaluation. The authors then conducted interviews with 10 students, 1 male, and 9 females (PA, female, interview, mid-anxious; PB, female, high-anxious; PC, male, high-anxious; PD, female, high-anxious; PH, female, high-anxious; PF, female, low-anxious; PG, female, high-anxious). They were conducted one by one through Tencent Meeting, and the interview time for each person is about an hour. After obtaining the consent of the participants, the whole process was recorded and then transcribed into text, as a way of exploring the specific reasons for the formation of French classroom anxiety and the specific impacts on learning under the online teaching model.

4 Results and Discussion

4.1 The General FLCA Levels of French Majors

As FLCAS is a 5-point Likert scale, a total score of 4–5 implies that the participant suffers from high general classroom anxiety, a score of 3–4 indicates moderate general classroom anxiety, and a score of below 3 reflects low general classroom anxiety. For each dimension, the calculation method is the same as above. As to the results of the scale and each of its dimensions, the scores are proportional to the level of anxiety that the participants felt. The results are presented in Table 1.

Table 1 shows that the students' general classroom anxiety level and their anxiety level of each dimension vary significantly from one individual to another (from 1.545 to 4.857). For the general FLCA, the participants scored from 1.848 to 4.545 on the FLCAS

	Maximum	Minimum	Mean	Median	Standard deviation
General classroom anxiety	4.545	1.848	3.132	3.152	0.540
Communication apprehension	4.857	1.714	3.209	3.214	0.659
Test anxiety	4.500	1.750	2.997	3.000	0.592
Fear of negative evaluation	4.818	1.545	3.133	3.091	0.607

Table 1. Maximum, minimum, mean, median and standard deviation of the results of FLCAS and its different dimensions

scale, with the mean of 3.132 and the median of 3.152, above the scale midpoint 3. These results can be deducted from around a half the participants suffered from moderate general classroom anxiety or even high general classroom anxiety, which illustrates that anxiety is a common phenomenon in French learning.

At the same time, the Table 1 shows that the average level of all the three anxiety dimensions is around 3, which means that about a half of the participants were strongly or moderately afraid of communicating in French and negative evaluation of others, and experienced moderate or high test-anxiety during their learning period.

The interviews showed the same results. In general, most of the French majors felt FLCA in their online classes in the context of COVID-19. However, some students reported that their anxiety level appeared lower than in their offline classes, as they could choose freely a more comfortable learning environment and stay away from peer pressure. In addition, the online chat box and other facilities allowed students to interact with the teacher with less stress and nervousness. Additionally, some interviewees claimed that their anxiety levels were associated with how much time they spend online. In the early stages of exposure to online education, students focused more because of the novelty, but as time became longer, students got bored to this mode of education and generally felt more anxious.

4.2 Causes for FLCA in the COVID-19 Context

In order to analyse the causes and origins for the learners' FLCA in COVID-19 context, their responses in interviews are analysed and the results are presented in Table 2.

As presented in Table 2, the interviewees cited a great number of origins for their FLCA during the online courses caused by COVID-19. Some of the causes are common for almost all foreign language classes, for instance: poor French level, lack of practice, being not (well) prepared, being not confident, fear of negative evaluation, etc. For example, PA attributed her feeling of anxiety to a relatively poor French level and lack of preparation: "I can be extremely nervous and anxious when I am called in class without preparation. My competences are not sufficient for me to come up with a perfect answer immediately." And for PC, "I'm anxious when I have to speak impromptu because I'm afraid that the teacher would be disappointed at my answer."

Table 2. Causes for FLCA in the COVID-19 context (Source: Interviews [N = 10])

Causes Nu	ımber
poor French level	6
the teacher being (too) strict	2
fear of negative evaluation	3 3 2
being not (well) prepared	3
being not confident	2
fear of tests	5
unsuccessful experience	1
other students being better at French	2
low learning efficiency during online courses	7
lack of communication with teacher and other stud-	ents 3
lack of supervision by teachers and classmates	1
lack of self-discipline to study French	6
lack of proper study environment	8
lack of instant feedback	1
lack of opportunities for practice	2
Difficulty in assessing individual progress compar	red to
other students	1
problems of connection	4
dissatisfaction with the online teaching model	2
asthenopia	1
restrictions and inconveniences caused by COVID-	-19 5

Meanwhile, there are also several causes of FLCA particularly due to online education, such as lack of proper study environment, lack of instant feedback, lack of learning efficiency, and vision fatigue, etc. For example, PE said that "the biggest problem is that the online courses are inefficient, they can never replace the face-to-face classes. We need to make eye contact with our teachers, we need to have an environment where everyone is learning French". And PJ insisted that "A home is a place for leisure and entertainment, I cannot focus without the supervision of my teachers and classmates. What's more, I'm totally tired of the endless network problems!". From their perspectives, online education and its inconvenience could cause low study efficiency and give rise to the feeling of anxiety.

While the direct impacts of COVID-19 on students are well evident, its indirect effects cannot be ignored.

During the interviews, many students complained that the epidemic not only caused their important exams to be postponed, such as the Test for French Majors-Band 4 (TFS-4) and Diploma in French language studies/Advanced French language diploma (delf/dalf), which disrupted their study rhythm but also seriously affected their life plans such as going abroad for exchange or graduate studies or employment. Additionally, the frequent isolation and restrictions on their freedom to travel prevent them from engaging in leisure activities to escape the stress of study. They feel less motivated to study when

	Communication apprehension	Test anxiety	Fear of negative evaluation	General French classroom anxiety
French competence	369**	371**	464**	464**

Table 3. Correlations between different dimensions of FLCAS and French self-rated competence

Notes: ** = p < .01; * = p < .05

Table 4. Linear regression analyses between different dimensions of FLCAS and French selfrated competence

		General classroom anxiety	Communication apprehension	Test anxiety	Fear of negative evaluation
French	β	464	075	134	340
self-rated	В	-13.040	-1.736	-3.437	-8.485
competence	t	-5.416	642	-1.215	-2.905
	p	.000	.522	.227	.004
	VIF	1.000	1.896	1.670	1.875
	Cohen's f^2	.690	.607	.635	.734

Note: effect size of Cohen's f^2 : small = $f^2 \le .02$; medium = $f^2 = .15$; large = $f^2 \ge .35$ (Cohen, 1988)

they are in online classes, which leads to resistance or even aversion to French classes and deepens their anxiety.

4.3 Impacts of FLCA on French Learning

To illustrate the impacts of FLCA on students' French language achievements, correlation analyses were run between the 3 dimensions of FLCAS (communication apprehension, test anxiety and fear of negative evaluation) and the students' self-rated scores of comprehensive French competences (Table 3), then linear regression analyses were performed, with the former as independent variables and the latter as the dependent variable (Table 4).

Table 3 indicates that all the dimensions of FLCAS were significantly inversely related to the learner's French self-rated competence, with a coefficient range from -.369 to -.464 (p $\leq .01$). The result suggests that the more an individual is afraid of communication and negative evaluation, the more he/she is anxious about French tests, the lower self-rated score he/she attributes to himself/herself, which implies lower general French competence.

Table 4 reveals that FLCAS was a powerful negative predictor for French-using competencies ($\beta = -.464$), with a large effect size (Cohen's $f^2 = 0.690$). From the results of Table 4, we can discover that the regression coefficient value for communication

Table 5. Impacts of Anxiety on Students' learning of French (Source: Interviews)

	Bad	Good and bad	Good	No effect	No comment
Interviewee R $(N = 10)$	7/70%	2/20%	0/0	1/10%	0/0

Notes: R = respondents

Table 6. Consequences of FLCA in COVID-19 context (Source: Interviews)

Consequences of FLCA
to fail to preform (speak/write/read/listen) well in French
to dare not to use French
to become unwilling to use French
to be unable to think well
to become less confident
to become less motivated
to be distracted in classes
to spend less time on French learning
to make more mistakes
to put off the tasks
to become more nervous
to be at a loss
to probably leave a negative impression on other people
to probably lose interest in French
to hate French
to be prone to emotional breakdowns
to fail the tests

apprehension and for test anxiety is respectively -1.736 (t = -0.642, p = 0.522 > 0.05) and -3.437 (t = -1.215, p = 0.227 > 0.05), which means that these two dimensions do not affect French learning outcomes. Nevertheless, the regression coefficient value of fear of negative evaluation is -8.485 (t = -2.905, p = 0.004 < 0.01), meaning that this factor can have a significant negative effect on a student's French-language competence (Cohen's $f^2 = 0.690$).

These results were consistent with the results of the interview, as shown in Table 5. Seven (70%) of the 10 interviewees declared that the FLCA was negative, because it could "reduce the efficiency of learning French" (PH). To these learners, the feeling of anxiety could lead to a series of negative effects associated to the French learning, as summarized in Table 6. For instance, anxiety could give rise to nervousness, slackness, inattentiveness in class, failures in French performances and tests, etc. Owing to anxiety, the learners became less attentive, less confident, unable to think well, prone to procrastination, prone to emotional breakdowns and even lose interest in French. For some participants, they would just "skip classes and be slack in work" (PH) or "stare at the phone screen during the whole French class" (PB), and they wouldn't "start to muddle through their tasks until the last minute" (PE). To PG, anxiety could make her "panic" in class or in tests and perform much worse than expected.

Although most interviewees reported that anxiety had a strong negative impact on their French studies, 1 interviewee (10%) commented that the feeling of anxiety didn't cause any effects on his French learning process; twenty percent of the participants (two) thought anxiety affected their acquisition of French in both good and bad ways. In their eyes, "a moderate level of anxiety brings constructive contribution for French learning, but when the anxiety exceeds a certain level, the impacts become negative" (PC), anxiety could "give rise to a low motivation and interest of learning French" but could also "let them recognize their true level of French and not be blindly confident, then in consequence, urge them to work harder" (PD).

4.4 Suggestions

For learners, especially those with high anxiety, it is necessary for them to first confront the existence of anxiety and actively try to adjust it to a tolerable extent through cognitive regulation and physical regulation, and to bring out more of the positive aspects of the FLCA as a motivating factor for learning. Next, although the epidemic has prohibited many leisure activities, students can still release stress by getting enough sleep and exercising indoors to ensure good study efficiency and memory. What's more, students should set correct self-expectations and realistic learning goals as well as heighten their learning methods. In addition to their own efforts, students should also communicate with their teachers and classmates and actively seek help from the outside world. Not only will this help to build good interpersonal relationships and reduce peer pressure, but also can increase their positive emotions about learning French.

To address anxiety in online classes, at the top of the list, teachers should enhance their empathy and consider the factors that may generate anxiety from the students' perspective then make appropriate teaching adjustments. At the same time, they should improve the technical operation of the network and ensure that the teaching equipment and network environment are stable. Secondly, teachers should give more positive feedback and encouragement to French majors, especially in the early stages of learning French. During the teaching process, teachers should encourage and devise appropriate mechanisms for mutual self-assessment, thus effectively reducing students' fear of negative assessment and facilitating the improvement of their language skills.

Universities need to listen to students appropriately, too. In terms of professional development, they should introduce as many various resources as possible and build diverse learning network platforms. In respect of the curriculum, the ratio of French courses to other public courses should be adjusted in line with the needs of students' changing grades. Additionally, they ought to provide students with psychological counselling, career planning, and offer more convenient logistics during the epidemic.

5 Conclusion

This study examined the levels, sources of FLCA and the impacts on academic performance in the COVID-19 context from the French majors' perspective. Based on the results, this study also provided useful insights from three aspects in order to improve

the quality of university French education. The major findings were: 1) anxiety is a common phenomenon in French learning, around a half the French-majored students suffer from moderate general classroom anxiety or even high general classroom anxiety. 2) Besides some traditional reasons like poor French level, lack of practice or confidence give rise to the FLCA, and the COVID-19 context along with its negative effects are also responsible for the anxiety in French learning. 3) FLCA can have a number of negative effects on learning French, including inferior French, test failure, and lack of interest. But a modest anxiety level can serve as a motivation in French learning.

However, since this study took advantage of French self-rated competence as the data, this scoring method may not be objective enough because of students' feelings of inferiority and conceit, and follow-up research needs to be improved in this regard to provide references for relevant French teaching practices.

References

- 1. Y. Guo, J.F. Xu, A multidimensional study of English learning anxiety among non-English major college students, Foreign Language World, 4, 2014, pp. 2–11.
- P.D. MacIntyre, Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), Affect in foreign language and second language learning. Boston: McGraw-Hill, 1998, pp. 24–45.
- 3. E.K. Horwitz, M. Horwitz, J. Cope, Foreign language classroom anxiety. The Modern Language Journal, 1, 1986, pp. 125–132.
- 4. D.J. Young, Creating a low-anxiety classroom environment: what does language anxiety research suggest? Modern Language Journal, 75(4), 1991.
- 5. K. Wang, L. Zhang, L. Ye, A nationwide survey of online teaching strategies in dental education in China. Journal of dental education, 2020.
- 6. M. Aparicio, F. Bacao, T. Oliveira. Grit in the path to e-learning success. Computers in Human Behavior, 66, 2017, pp. 388–399.
- 7. M.T. Kaisar, S.Y. Chowdhury, Foreign language virtual classroom: anxiety creator or healer? English Language Teaching, 13(11), 2020, pp. 130–139.
- 8. M. Liu, R. Yuan, Changes in and effects of foreign language classroom anxiety and listening anxiety on Chinese undergraduate students' English proficiency in the Covid-19 context. Frontiers in Psychology, 12, 2021.
- 9. Y. Jin, K. de Bot, M. Keijzer, The anxiety-proficiency relationship and the stability of anxiety: The case of Chinese university learners of English and Japanese. Studies in Second Language Learning and Teaching, 5(1), 2015, pp. 41–63.
- 10. M. Liu, J. Jackson, An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. Modern Language Journal, 92(1), 2008, pp. 71–86.
- 11. S.S. Samaneh, N. Noordin, Relationship among Iranian EFL students' foreign language anxiety, foreign language listening anxiety and their listening comprehension. English Language Teaching, 6(5), 2013, pp. 1–12.
- R. Clement, B.G. Kruidenier. Aptitude, Attitude and Motivation in Second Language Proficiency: A Test of Clément's Model. Journal of Language & Social Psychology, 4(1), 1985, pp. 21–37.
- Clement, R. Second Language Proficiency and Acculturation: An Investigation of the Effects of Language Status and Individual Characteristics. Journal of Language & Social Psychology, 5(4) 1987, pp. 271–290.

- 14. V.L. Trylong, Aptitude, attitudes, and anxiety: A study of their relationships to achievement in the foreign language classroom. Purdue University, 1987.
- R.C. Gardner, R. Moorcroft, P.D. MacIntyre, The role of anxiety in second language performance of language dropouts. (Research Bulletin No. 657). London, Ontario, Canada: The University of Western Ontario, 1987.
- L.H. Zheng, Analysis of French majors' study motivation survey, Modern Foreign Languages, 1, 1987, pp. 56–64.
- 17. R.C. Gardner, R.N. Lalonde, R. Moorcroft, F.T. Evers, Second language attrition: the role of motivation and use. Journal of Language & Social Psychology, 6(1), 1987, pp. 29–47.
- L.E. Varro, Understanding French Language Anxiety in Grade 4–8 Classrooms. In Dean's Graduate Student Research Conference 2015.
- 19. E. Kuşçu, Teaching the anxiety of learning a foreign language that influences high school students in learning French as a second foreign language "The case of Denizli". Journal of Language and Linguistic Studies, 13 (1), 2017, pp. 88–102.
- R.C Gardner, P.C. Smythe, R. Clément, L. Gliksman, Second language acquisition: A social psychological perspective. The Canadian Modern Language Review, 32, 1976, pp. 198–213.
- 21. H.J. Liu, T.H. Chen, Learner differences among children learning a foreign language: language anxiety, strategy use, and multiple intelligences. English Language Teaching, 7(6), 2014, pp. 1–13.
- 22. Y. Aida, Examination of Horwitz, Horwitz, and Cope's Construct of Foreign Language Anxiety: The Case of Students of Japanese. Modern Language Journal, 78(2), 1994, pp. 155–168.
- P.D. Macintyre, R.C. Gardner, Language anxiety: Its relationship to other anxieties and to processing in native and second languages. Language Learning, 41(4), 1991, pp. 513–534.
- 24. E.M. Phillips, The effects of language anxiety on students' oral test performance and attitudes. Modern Language Journal, 76(1), 1992, 14–26.
- 25. K.M. Bailey, Competitiveness and anxiety in adult second language learning: Looking at and Through the Diary Studies. Newbury House, 1983, pp. 67–103.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

