How Do Anxiety and Attitude Affect Learners' English Performance?

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Abstract. After the outbreak of COVID-19 in 2019, in the face of the epidemic's impact, China's education has received excellent resistance, and the traditional education model has undergone great changes. As many online teachings began to appear, teachers could not communicate face-to-face or urge students to learn in time. This inevitably leads to the students 'L2 learning anxiety and a change in their L2 learning attitude. However, few studies have investigated L2 learning anxiety and L2 learning attitudes among middle school students and the relationship between L2 learning anxiety, learning attitude and learning performance. The present study used SPSS to analyze the data and figure out these two questions. The study took 117 middle school students in Jiangxi Province, China, as the research object, a population that has not been featured in the literature thus far, to study the L2 learning anxiety level, L2 learning attitude level, and the relationship between anxiety, attitude, and language performance of Chinese middle school students. The findings indicate that most of the students had a high level of L2 learning anxiety and a high level of L2 learning attitude in the Chinese context. L2 learning Anxiety was negatively correlated with language performance, and the L2 learning attitude and learning performance were positively correlated.

Keywords: language learning performance · L2 language anxiety · L2 learning attitude · Chinese middle school students · Pandemic

1 Introduction

In traditional education, teachers can play a good role in supervising the classroom, and teacher teaching mainly revolves around teaching materials, homework, and examination papers. However, under the current international epidemic situation, schools in many countries and regions have already changed the education mode and adopted a series of methods such as online, self-study, and extracurricular expansion to change the traditional teaching mode. After the conventional teaching mode change, teachers cannot communicate face-to-face with students and cannot urge students to learn in time. Language learning is more from teachers leading students to learn and students play their subjective initiative and learn consciously. Such changes, under the constant requirements of grades, will inevitably bring invisible psychological pressure to students, resulting in students' emotional anxiety and L2 learning attitude changes. Therefore, understanding students' L2 learning anxiety and L2 learning attitudes online is very important in the online context.

In current times, Coşkun and TAŞGIN (2018 P.2) proposed "The emotionally affirmative evaluation of an experience encourages an approach to a similar experience in the future, but a negative evaluation that can develop against the same phenomenon leads to avoidance behavior." Thus, learners cannot develop better speaking skills because of anxiety (Soomro & Farooq, 2018). [5, 15].

However, through reading a few pieces of literature that focus on the background of China in the current research, I noticed that China is now the second largest economy in the world, and English learning is a compulsory subject in Chinese education. As English is the most commonly used language in the world, it is essential to study English learning with a Chinese background. Second, the existing literature primarily focuses on the language learning of college students but needs to pay more attention to junior high school students, who are about 12–14 years old and in the golden age of language learning. Therefore, it is of great significance to study the learning of junior high school students. In the past studies, few academic studies focused on anxiety and attitude. However, attitude is a crucial learning factor, while anxiety is an emotional factor that affects people's learning. Therefore, I combined the two aspects.

To fill these gaps, this study aims to investigate Chinese middle school students' anxieties and attitudes toward English lessons among 117 young learners. The research questions are about the level of language L2 learning anxiety and L2 learning attitude of Chinese middle school students during the epidemic, and the relationship between L2 learning anxiety, L2 learning attitude, and language performance.

2 Literature Review

2.1 Anxiety

There are many things that could be improved in learning languages. Diverse factors are making it difficult for learners. Cultural background, learning abilities, and mental. One of these factors is 'anxiety.' Anxiety can be taken as the subjective feeling of tension, apprehension, nervousness, and worry that comes up with the automatic nervous system. [8, 9].

Horwitz et al. gave their understanding of anxiety and the concept of "Foreign Language Anxiety" was carried out by them, which they see as the reason for the adverse emotional reactions of foreign language learners. This concept is suggestive of the three types of anxiety: communication apprehension, test anxiety, and fear of negative arising concerning the L2 learning context. [9], As a result of these studies by Horwitz et al. (1986), the relationship between anxiety and foreign language learning seems negative. [9].

2.2 Attitude

Attitude is another psychosocial factor that plays an important role in foreign language learning. Therefore, while investigating the study, the foreign language attitude, which is among the important individual factors, should be focused on (Çimen, 2011) [4]. On attitude's role in language learning, attitude is regarded as a triggering factor in foreign

language learning. [16]. And according to Abidin, Mohammadi and Alzwari (2012), the attitude towards foreign language learning as much as the individual's capacity determined success in foreign language teaching [2]. Attitude is also separately described as 'language attitudes' in the Longman Dictionary of Applied Linguistics and Language Teaching (2010) by stressing the measurement of language attitudes in language teaching and language planning.

2.3 Anxiety, Attitude, and Language Learning Achievement

After reviewing my past studies, I found that the relationship between anxiety and language learning is roughly the following categories. Anxiety benefits language learning.

The anxiety impedes language learning. It has been reported that a negative relationship exists between foreign language anxiety and foreign language achievement. Significant negative correlations existed between foreign language anxiety and academic achievement [2, 6, 19]. Anxiety determined in the English language manipulates students' achievement and makes it more difficult to achieve their goals. Anxiety in language learning can play a significant and influential part in students' target achievement [1].

As for attitude, Whether the success or the failure of the foreign language learning process is firmly related to students' attitudes toward foreign languages. The quantitative study by Hussain and Zaman (2011) reveals that attitude and language learning have a close link and influence [10]. When investigating some studies on foreign language attitude it is reported that students have a positive attitude towards learning English [7, 14, 18]. In contrast, the negative attitude of learners results in failure to learn a foreign language indicated that negative attitudes towards a language influence language performance in a negative way [2, 17].

For the relationship between anxiety and attitude. A positive attitude would lead students to start enjoying foreign language learning and decrease their anxiety. A negative relationship between dimensions of foreign language classroom anxiety and dimensions of language attitude shows that low language attitude might support a high level of language anxiety [11].

2.4 The Present Study

However, all of the above studies are based on traditional teaching methods. This study aims to explore the changes in foreign language anxiety and foreign language L2 learning attitudes in the epidemic situation and their impact of them. This study aims to investigate middle school students' anxieties and attitudes toward English lessons and to improve the quality of teaching during the epidemic period or in the post-epidemic period.

RQ1: What's the level of language L2 learning anxiety and L2 learning attitude of Chinese middle school students during the epidemic?

RQ2: What's the relationship between L2 learning anxiety, L2 learning attitude, and language performance?

3 Methodology

3.1 Participants and Contexts

Through the convenience sampling approach, 117 middle school students (39 females and 78 males) were invited to participate in this questionnaire survey. Those participants came from 4 public schools in Ji'an city, Jiangxi province, and they were aged between 12 to 16. These participants came from three different grades. The third grade has the largest population (48%) then follow by the second grade (28%) and the first grade (24%). Among these participants, their L1 language is Chinese, and their L2 language is English. Those participants haven't gained any experience studying or travelling abroad.

English is one of the nine-year compulsory education subjects. These students must pass the entrance examination to enter high school. Moreover, English is also a compulsory course for senior high school students. And it is a prerequisite for them to obtain a higher degree education.

Students take two to three English classes a day and take an English interest class on Saturday with 45 min per class. The schools I surveyed are located in Jiangxi Province, China, located in the southeast of China. I read the literature and found that few people have studied middle school English education in this city. Although the English education in this city is relatively backward, it can be seen from the survey that this region attaches great importance to English education as a whole. Therefore, it is essential to study this region.

3.2 Instrument

The questionnaire started with a demographic section containing their age, gender, grade, school, and subject background. The second section mainly investigated the two independent factors (e.g., L2 learning anxiety and L2 learning attitude) and one dependent factor (language performance).

(1) Foreign Language Class Anxiety Scale (FLCAS). The author adapted the FLCA scale from an article which is extracted from the FLCAS[9]. Consistent with the original FLCAS, two items were phrased to indicate low anxiety, and six were phrased to indicate high anxiety. The low anxiety items were reverse coded so that high scores reflect high anxiety for all items on this measure. Responses were given on standard 5- point Likert scales with the strongly disagree = 1, disagree = 2, neither agree nor disagree = 3, agree = 4, and strongly agree = 5. The sample item started with "Even if I am well prepared for the English listening and speaking class, and I feel anxious about it." According to the calculation, internal reliability was good (Cronbach alpha = 0.86) [12].

(2) The scale of the attitude toward studying English. The author adopted it from the study by Mahdavi and Jodai (2012) which is derived from the study (Chalak & Kassaian 2010). Four items referring to the attitude toward studying English were positively phrased to reflect a high attitude, and three of them were reverse-coded to reflect a low attitude. Responses were given on standard 5- point Likert scales with the anchors disagree = 1, disagree = 2, neither agree nor disagree = 3, agree = 4,

and strongly agree = 5. The sample item is "English is my weakest." According to the calculation, Internal reliability was good (Cronbach alpha = 0.73, N = 7) [12].

(3) Language performance: To investigate the students' language performances, we used their midterm and final exam scores, with a total score of 120 for the study, and the paper was divided into six sections. The first section is the listening task with 15 listening single-choice questions, 5 listening fill-in-the-blanks questions, and one point for each. The second section is the vocabulary choice questions with 8 single choice questions, one point for each. The third part is the cloze questions with a total of 26 questions, one point for each. The fourth section is reading comprehension questions with a total of 23 questions, two points for each. The fifth section is completing the dialogue, one point for each, with a total of 5 questions. The test end with the last section, a writing task with a total of 1 question, and 15 points. The students are required to complete this exam within 120 min. After the students return the papers to the classroom teacher, teachers are responsible for correcting and remarking on their test papers.

3.3 Data Collection

Before doing the current survey, we first contacted the head of the school and the classroom teachers to seek support of the current study. After getting their permission, the author asks the classroom teachers for help with sending out the questionnaire administered through Wenjuanxing software (a Chinese version of Google Forms) and was sent via the WeChat link in their student group. The students were told that their names and identity were anonymous.

In the data collection process, firstly, students were informed about the purpose of the research. They are informed that participation is voluntary. They can withdraw from this survey at any time without any consequence. The guarantee was that we would not share the data with third parties.

3.4 Data Analysis

SPSS 26 was adopted in the current study to uncover the research. Prior to addressing the collected data, a series of preliminary analysis steps were conducted.

First, the author checked whether the data of FLCAS or the attitude towards studying English were normally distributed. A close look at the distribution of the attitude towards English study and FLCA and the calculation of Q-Q plots suggest that they follow a normal distribution reasonably well.

Second, the current study discloses the descriptive analysis of the student's responses and then analysis the Skewness and Kurtosis of the current study to make sure the data was normally distributed. If the result of the Skewness and Kurtosis are within plus or minus three, it demonstrated that the data was normally distributed.

And then, to ensure the internal consistency and the validity of the questionnaire, we examine the Cronbach Alpha and EFA. If the result of the Cronbach Alpha and EFA is above 0.7, it demonstrated that the question of the present study has good internal consistency and the validity of the questionnaire.
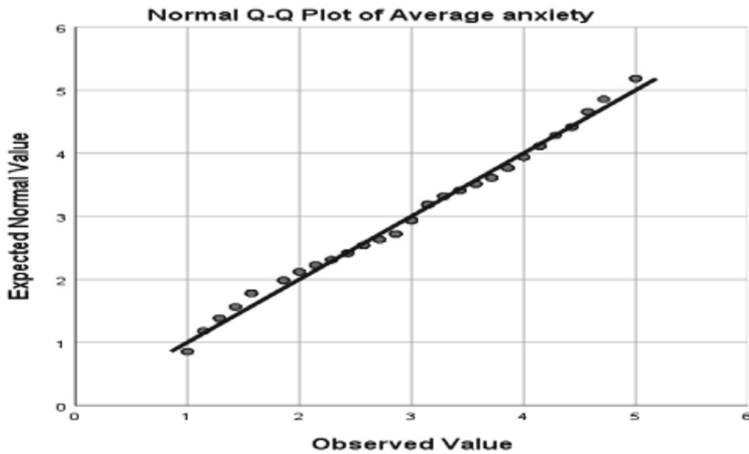
Fig. 1. QQ plot of anxiety.

In order to understand the predictive effect of anxiety attitudes on learning achievements. We research the question, "What's the level of language L2 learning anxiety and L2 learning attitude of Chinese middle school students during the epidemic?" by using descriptive analysis (M/SD). We use the correlation analysis to research "What's the relationship between L2 learning anxiety, L2 learning attitude, and language performance"?

4 Results

4.1 The Preliminary Analysis

I first run the normality distribution in order to make sure of the following analysis.

The distribution of the attitude towards English study and FLCA and the calculation of Q-Q plots (Fig. 1. And Fig. 2.) suggest that they follow a normal distribution reasonably well.

The current study first disclosed the normal distribution of the present study by looking into the descriptive analysis table 1. The data results are within plus or minus three, consistent with the normal distribution.

To ensure the internal consistency and the validity of the questionnaire, we examine the Cronbach Alpha (table 2) and EFA (table3). The result of the Cronbach Alpha and EFA above 0.7, it demonstrated that the question of the present study has good internal consistency and the validity of the questionnaire.

4.2 The Level of Language L2 Learning Anxiety and L2 Learning Attitude of Chinese Middle School Students During the Epidemic

Table 4 showed the data obtained from the research to determine the level of language L2 learning anxiety ($M = 3.02, SD = 0.09$) and L2 learning attitude of Chinese middle school students ($M = 3.26, SD = 0.05$) during the epidemic, revealing that the participants had more than moderate anxiety and positive L2 learning attitude.
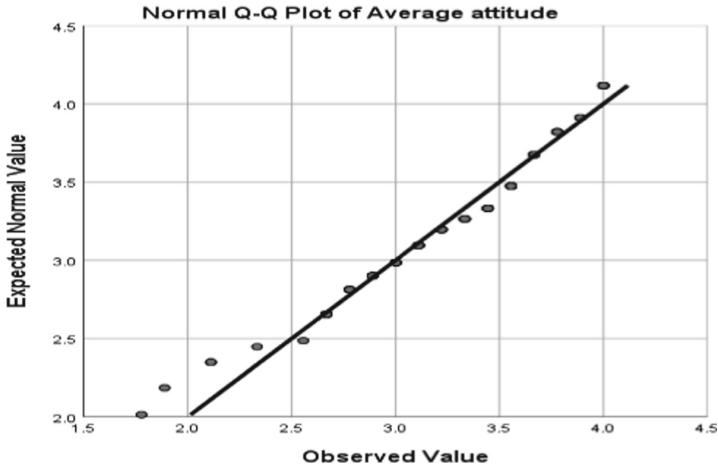
Fig. 2. QQ plot of attitude.

Table 1. Descriptive statistics for Skewness and Kurtosis

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Average anxiety	117	-0.144	0.224	-0.621	0.444
Average attitude	117	-0.64	0.224	0.19	0.444

Table 2. Reliability statistics for the internal consistency

Reliability Statistics		
	Cronbach's Alpha	N of Items
Anxiety scale	0.862	8
Attitude scale	0.73	7

Table 3. Reliability statistics for the validity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	**Anxiety Scale**	0.84
	Attitude Scale	0.7

Table 4. Result of the descriptive statistics.

	N	Range	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Average Anxiety	117	4	1	5	3.02	0.09
Average Attitude	117	2.22	1.78	4	3.26	0.05

Table 5. Correlations analysis betweenL2 learning anxiety, L2 learning attitude and the language performance.

		Language performance	Average anxiety	Average attitude
Language performance	**Pearson Correlation**	1	-.301**	.264**
	Sig. (2-tailed)		0.001	0.004
	N	117	117	117

Note: p < 0.001***

4.3 The Links Between FLCA, L2 Learning Attitude and Learners' Grades

Table 5 showed the correlation between L2 learning anxiety and L2 learning attitude and language performance.

First, we conducted a series of Pearson correlation analyses to explore the relationships between language performance, L2 learning attitude, and L2 learning anxiety. The results summarized in Table 5 showed that language performance and L2 learning anxiety levels were significantly and negatively correlated. That is to say, the higher the anxiety level is packed up with, the lower the English grades, and the lower the anxiety level is full up with, the higher the English score (r = -0.301, p < 0.001).

However, English language performance and L2 learning attitude levels were significantly and positively correlated with each other. To put it in another way, The higher attitude level is whole up with, the higher English grades, and the lower attitude level is full up with, the lower English grades (r = 0.264, P < 0.001).

5 Discussion

This study examined the level of L2 learning anxiety and L2 learning attitude based on a sample of Chinese middle school students during the epidemic. In addition, this study further examined how language performance was affected by two non-cognitive factors, anxiety and attitude.

RQ1 attempted to explore the level of L2 learning anxiety and L2 learning attitude of participants of Chinese middle school students in Jiangxi province. The results indicated that most students had a high level of L2 learning anxiety and a high level of L2 learning

attitude in the Chinese high-state context, which was consistent with the study by Abidin et al. (2012), Çimen, (2011), Horwitz et al. (1986), Toomnan Intaraprasert (2015) [2, 4, 9, 16]. This is closely related to the increasing tension in educational resource distribution in China. That is to say in the Chinese high-state test-oriented context, the students who were born in a small county, need to invest more effort and have a better attitude to the learning goal. Only through this, they can survive in this fierce competition. This motion has been confirmed by Zhao and Wang (2023) that fierce English learning competition is highly competitive[21].

The RQ2 aimed to explore the relationship between L2 learning anxiety, L2 learning attitude, and L2 language performance. The results indicated that anxiety was negatively correlated with academic performance, and the L2 learning attitude was positively correlated with learning performance. That is to say, those with a high level of anxiety are likely to have a bad language learning achievement compared with their counterparts. At the same time, this finding was corroborated by the study by Abidin et al. (2012). Horwitz et al. (1986), Hussain and Zaman (2011)[2, 9, 10]. That is to say that academic performance was negatively affected by anxiety and was positively affected by the L2 learning attitude. If students are in anxious situations, they will be too nervous to actively participate in classroom learning, so they can't get good learning achievements.

Along with the process of emotional progress, un-cognitive factors gradually play an important role in academic achievement. The present study thus invites further empirical study to focus on more important but less feature psychological factors.

6   Conclusion

This paper used 117 middle school students from Jiangxi Province, China, as subjects and studied the level of language L2 learning anxiety and L2 learning attitude of Chinese middle school students during the epidemic and the relationship between anxiety, attitude, and language performance. The present study used the SPSS to analysis the data and figured out these two questions. The result showed that most of students had a high level of L2 learning anxiety and a high level of L2 learning attitude, then they reported that Chinese English learners had a high level of L2 learning anxiety and a high level of L2 learning attitude in the Chinese context, and anxiety was negatively correlated with academic performance and the L2 learning attitude and language learning performance were positively correlated. This inspires teachers to reduce students' anxiety in class as much as possible and improve students' attitude so as to enhance the teaching purpose.

The present study has several limitations that might confine generalizations. First, no more information could be obtained because this study lacks qualitative interview data and only uses cross-sectional data. In future studies, qualitative studies can be taken to investigate the mechanism of anxiety and attitude. Second, in this study, the subjects were monotonous, only focusing on middle school students in four middle schools in Jiangxi. In fact, there are different schools in China. In future studies, information about different middle schools can be collected in many ways to make the data more representative.

There are several implications in the present study. Anxiety has a negative effect on students, and attitude has a positive effect on students. This inspires us, the teacher must pay attention to the students' anxiety in the classroom, reduce the difficult mood, and create a happy and healthy educational environment.

The way to reduce students' anxiety is that first to create a relaxing environment for language communication, encourage students who dare not speak English or speak the wrong English. Secondly, in the teaching, the teachers are suggested not to deliberately emphasize the students' academic performance, which will deepen the students' anxiety. Third, the teachers are suggested to give more encouragement to the students and make them recognize themselves that they can do better so as to relieve their anxiety.

In terms of the attitude, attitude is the trigger factor for learning. In addition to the supervision of parents and schools, teachers should create an English learning atmosphere so that students can enjoy English learning and their grades will naturally improve.

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