

A study on the influence of academic emotion on the effectiveness of online foreign language learning

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Abstract: Based on the control-value theory, broaden-and-build theory and well-being theory, this study investigated the enjoyment and boredom of 200 Chinese college students in online foreign language classes through questionnaires, and investigated the predictive effects of these two emotions on the learning effectiveness of online foreign language classes. In addition, 10 subjects were randomly selected to conduct semi-structured interviews and ask questions about their emotional changes and reasons in online foreign language learning. The results showed that: in the online foreign language classroom environment, the level of enjoyment in foreign language was higher, and the level of boredom was medium; students' foreign language enjoyment has a positive correlation with their academic achievement, while boredom has a negative correlation with their academic achievement. The interview results show that the emotional changes of students are mainly caused by network problems, teachers and so on. These research results suggest that educators should pay more attention to students' emotional experience in the online course environment and fully mobilize students' enthusiasm.

1. Introduction

With the development of positive psychology in recent years, scholars have gradually come to realize the importance of emotion in SLA, and relevant theoretical researches have also been deepened. For example, scholars have continuously enriched a variety of emotions, including positive emotions and negative emotions such as enjoyment and boredom.

However, few existing studies investigated both two emotions in one study. Because of the personalized characteristics of online teaching environment, it is easy to cause the change of students' emotions, and then have a positive or negative impact on students' academic achievement. Therefore, this study will investigate the relationship between foreign language enjoyment (FLE), foreign language classroom boredom (FLCB) and English academic achievement of Chinese college students in the environment of online courses, and then put forward teaching suggestions for online teaching environment.

2. Literature Review

Inspired by positive psychology, in recent years, scholars have begun to choose FLE as a common positive emotion to conduct empirical research, but the negative emotion usually accompanied by such research is foreign language anxiety. After analyzing the logs of 30 Polish graduate students majoring in English, Zawodniak et al.^[1] found that all the students complained about the boring experience in English classes. Furthermore, scholars put forward the concept of boredom in foreign language learning.

2.1 Definition of Foreign language enjoyment

Foreign language enjoyment (FLE) is a highly arousing procedural emotion with environmental dependence^[2]. According to the broaden-and-build theory and the affective filter hypothesis, the positive emotion of enjoyment can reduce the degree of affective filtering, broaden learners' resources, promote language input and output, enhance the happiness of English learning, and help long-term language learning.

Dewaele et al. proposed that FLE is a combination of positive emotions that largely corresponds to the ability to solve difficult tasks and respond to challenges^[3]. Dewaele and MacIntyre pointed out that enjoyment in a foreign language is the key to unlock learners' potential and a key component of flow experience, which helps learners overcome learning difficulties in foreign language learning^[4]. Positive emotions gained after completing learning tasks and satisfying psychological needs^[5] are associated with higher levels of motivation, engagement, actual and self-perceived second language performance and willingness to communicate^[6]. It helps learners develop their creativity and explore the unfamiliar language world^[7]. FLE can expand an individual's reserves of instantaneous thought and action, and build up resilient mental resilience and individual resources^[8].

2.2 Foreign language classroom boredom

Boredom is a silent emotion that will not have a disastrous impact on foreign language learning. Once considered a self-referential term, boredom is associated with individual personality traits such as boredom, indifference, dullness or dullness. Although it is common in teaching, it is not obvious and is often ignored. On the other hand, students may deliberately conceal boredom, which makes it more difficult to attract attention^[9]. In addition, boredom is very complex and is multidimensional and multifaceted related to emotion, cognition, expression and motivation^[10], involving multiple fields of psychology, sociology and education^[11]. Boredom is a mixture of disconnection, dissatisfaction, inability to concentrate, decreased vitality and distorted time perception^[12], which is manifested by inattention, distraction, empty mind and loss of purpose. Boredom makes it necessary for individuals to participate in activities that cannot be satisfied but do not want to, which leads to psychological detachment from learning activities, lazy interaction with teachers and classmates, and gradual loss of motivation to perform learning tasks, resulting in aversive experience^[13].

With the research on academic emotion, foreign language classroom boredom (FLCB) as a sub-emotion has gradually attracted the attention of researchers. Pekrun^[14] regards academic boredom as a kind of academic emotion, which is an active academic emotion and classified as a dimension of negative and low arousal emotion. He believes that it is the boring experience caused when students perceive that learning activities have no value and experience high or low sense of control.

Because boredom has a negative effect on students' motivation and self-regulation, and thus on their academic achievement, it is necessary to carry out research on boredom. However, the existing

researches on FLCB mainly stay at the theoretical level^{[15][16][17]}, and the empirical research on it needs to be in-depth.

2.3 Related Studies on FLE and FLCB

In the past, a large number of empirical studies mainly explored the prediction and impact of anxiety, a negative emotion, on academic achievement. For example, Dewaele & Alfawzan's study found that FLE can positively predict foreign language achievement, while foreign language anxiety can negatively predict foreign language achievement^[2]. Li also confirmed in the study of Chinese high school students that FLE positively predicts English performance^[18]. However, the research on FLCB is still lacking. Moreover, in the online foreign language classroom environment, students' positive and negative emotions change in a complex way^[19]. So it is necessary to study the impact of the two emotions in online environment.

To sum up, existing studies on foreign language emotion mainly focus on traditional teaching, and pay insufficient attention to foreign language emotion in online environment. Moreover, existing studies lack research on FLE and FLCB. Therefore, this study will start from the online foreign language teaching environment, and carry out an empirical exploration on students' enjoyment and boredom in foreign language learning.

3. Research Design

3.1 Research Questions

The following questions are addressed:

- (1) What is the overall level of students' enjoyment and boredom in an online foreign language classroom environment?
- (2) What is the relationship between the two academic emotions and foreign language academic achievement?
- (3) What factors contribute to the emotional change of students in the online teaching environment?

3.2 Research Participants

The participants of this study were non-English majors who have taken CET-4. They were from three universities in Shanxi, China.

3.3 Research Instruments

3.3.1 Questionnaire survey

The questionnaire is used in the study. Based on *The Chinese version of foreign language enjoyment Scale* and *Foreign language learning boredom Subscale* developed by Li et al.^{[7][16]}, the questionnaire consists of two parts: the former is the personal information of the tested students, which is composed of grade and CET-4 scores; the latter is the main part, including 19 questionnaire items. The author adopted the 5-Point Likert Scale, which represents the frequency of strategy use on a scale of 1 to 5. In addition, Cronbach's Alpha value of the questionnaire were 0.830 and 0.947, The validity was ideal($\chi^2/df=72.975/41<3$; CFI=.975>.90; TLI=.967>.90; SRMR=.034<.08; RMSEA=.041<.08)($\chi^2/df=44.990/15<3$; CFI=.988>.90; TLI=.977>.90; SRMR=.023<.08; RMSEA=.076<.08), which indicating good reliability and validity.

3.3.2 Semi-structured interview

In this study, interview outline was prepared according to the actual situation of the subjects, and the specific emotional state behind the quantitative data was discussed in the form of subjective question and answer, which was used as a supplementary form of questionnaire survey to provide support for the data analysis results.

The interview mainly includes three aspects: how do students' emotions change in the online foreign language classroom environment, why do these emotions change, and what are the specific manifestations when emotions change. Through in-depth conversation with the subjects, on the one hand, the real validity of the questionnaire was verified, and on the other hand, the status and inducing factors of the subjects' online foreign language enjoyment and foreign language boredom were further understood.

4. Results

4.1 Overall level of online academic emotion

In order to investigate the characteristics of enjoyment and boredom of Chinese college students in the environment of online foreign language courses, this study first used SPSS26 for descriptive statistical analysis.

As can be seen from Table 1, the students' overall level of FLE was above average, and the level of FLCB was also above average. However, it was obvious that the students experienced higher happiness than boredom in the online foreign language classroom environment.

Table 1: Descriptive statistics for the two types academic emotions.

Academic emotion	N	Min	Max	M	SD
FLE	200	1.000	5.000	3.450	.6067
FLCB	200	1.364	4.636	3.053	.7164

According to the descriptive statistical analysis, the average values of the two emotions reflect the emotional characteristics of learners in online foreign language classes. On the whole, students enjoyed the novel teaching mode, but at the same time, they felt moderately bored due to the change in teaching mode. This also responds to the study by MacIntyre&Gregersen^[20].

4.2 The Correlation between FLE, FLCB and CET4 scores

Based on descriptive statistical analysis, SPSS 26 was used in this study to conduct a series of pearson correlation analyses, and the results are shown in Table 2.

Table 2: Correlation between FLE, FLCB and CET4 scores

	FLE	FLCB	CET4
FLE	--	-.199**	.595**
FLCB	-.199**	--	-.547**
CET4	.595**	-.547**	--

As shown in Table 2, this study found a negative correlation between FLE and FLCB, which confirmed Li's research results in the environment of foreign language online courses^[7] and also supported Li's qualitative research results^[5]. On the other hand, this study shows a high degree of negative correlation between these two academic emotions, indicating that the more pleasant emotions obtained from online foreign language classes, the less boredom learners perceive.

Table 2 shows that in the online foreign language classroom environment, FLE has a significant

positive predictive effect on foreign language achievement, while FLCB has a negative predictive effect on foreign language achievement. This result verifies the relationship between academic emotion and academic achievement in the control value theory.

4.3 Analysis of interview data

In this study, 10 students were randomly selected from the subjects for semi-structured interviews. The purpose of the interview is to explore the following two aspects of the subjects' emotional experience: the factors that induce enjoyment and boredom in foreign languages; and the performance of enjoyment and boredom in foreign languages.

1) What makes you feel enjoy or bored? Please give an example.

When it comes to enjoyment, most of the students said that their enjoyment increased rapidly when they answered the questions correctly and made progress in English learning, indicating that the sense of achievement in online English learning is an important factor to maintain students' persistence in learning. Three students also mentioned environmental factors, because in the online course environment, there is no need to face the teacher's questions, psychological pressure will be much less. In addition, two students mentioned the teacher factor. On the one hand, they liked the interesting videos and emojis on the PPT in the online English class; on the other hand, the teacher's praise would improve the motivation of learning. One student said that the English class was always happy, both online and offline. One of them said that although his English score is not ideal, but online English learning is very interesting.

About foreign language boredom, three students think that the main reason for their boredom is Internet problems. In class, either the teacher's network is not good, or their own network is not good, which affects their learning. Two students thought the content was boring because the tasks involved only language knowledge and the tasks were relatively boring. Another student mentioned that online teaching, the teacher is also a bit perfunctory, the tone of the ordinary online English class will make the boredom of sudden rise. Another two students said that they simply don't like English and find it boring.

2) How do you behave when you are enjoy or bored?

When asked about enjoyment, students said they looked forward to the rest of the class more, and were more focused and engaged in class activities. And they feel motivated to learn English, and will spend more time and energy after class. When it comes to the performance of boredom, students said that there will be daze, wandering, careless, small movements and other performances, gradually out of the classroom, and serious may hang up and do other things on their own.

5. Discussion

In terms of quantitative data, students in the online foreign language classroom environment have a high level of FLE, and a moderate level of FLCB. FLE and FLCB showed a moderate to low negative correlation. FLE had a significant positive predictive effect on English academic achievement, while FLCB had a negative predictive effect on academic achievement.

Through semi-structured interviews, it is found that there are two main reasons that affect the emotional changes of students in online foreign language classes. In the online environment, the quality of the network directly determines the quality of the classroom. Only by keeping the network open for both teachers and students can students' emotional changes be stable. The second aspect is the subjective factor. If students like online teaching or English learning, they will be happy; otherwise, they will be bored. A teacher's mood in class will also affect students' state. If the teacher is well prepared before class, the intonation changes, the class content is full, and the teacher can operate the network equipment flexibly, it will also affect students' emotional

experience in online class. This research findings suggest that in the digital teaching environment, we should pay more attention to students' academic emotional experience and fully mobilize students' positive emotions in class.

6. Conclusion

This study adopts mixed research methods, and uses semi-structured interviews as support after quantitative data to study the emotional status of students in online foreign language classroom environment and its correlation impact on English academic achievement. Then, qualitative interviews are used to analyze the reasons for the changes in students' emotions. According to the research results, this study gives suggestion for the future online course teaching. Inevitably, this study has some limitations, and there is no diversified sample size. Future research can be improved from this aspect.

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