The Relationship between Senior High School Students' Foreign Language Learning Boredom and English Achievement

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Abstract—This study aims to examine how Foreign Language Learning Boredom (FLLB) is related to foreign language achievement of Chinese senior high school students in an English as a foreign language context. Informed by the control-value theory, the questionnaire of FLLB administered to 128 senior high school Chinese students in grade one. Analysis of the questionnaire data and the final English exam scores shows that FLLB among senior high school students in China was at a medium level. Specifically, of the seven dimensions, the level of PowerPoint presentation boredom was the highest, while the level of Teacher-dislike boredom was the lowest; a negative correlation was found between students' FLLB and English achievement. Of seven dimensions, foreign language classroom under-challenging task boredom, homework boredom, general learning trait boredom, and over-challenging or meaningless task boredom were significantly relevant to English final exam scores. Moreover, FLLB contributed significantly to the negative prediction of English test scores.

Keywords—foreign language learning boredom, English achievement, control-value theory

I. INTRODUCTION

In English language learning, learners experience a variety of emotions, such as anxiety, enjoyment, boredom, shame, and the like, of which, boredom is the most common emotion experienced in foreign language and second language classes [1]. Boredom has been extensively studied in the fields of psychology, educational psychology, and pedagogy. However, in the field of foreign and second languages, boredom does not cause disruptions in the classroom, therefore little attention has been paid to students' boredom and usually it is attributed to students' personal factors, such as anxiety, depression, and laziness [2].

So far as the research topic is concerned, previous studies have mainly explored the forming factors of Foreign Language Learning Boredom (FLLB) and have not attached importance to the influence of boredom on the process and effectiveness of foreign language learning [3]. However, it is one of the core goals of foreign language teaching to help learners achieve good foreign language performance [4]. Therefore, one of the most urgent issues should be to investigate the effects of boredom on foreign language achievement [5]. For the research groups, so far, most of the researches on boredom in foreign language teaching and learning at home and abroad have taken college students as the research subjects.

Given the prevalence and influence of boredom in language learning, based on the control-value theory, the present study intends to explore the level of FLLB in senior

high school English learning context, and investigate the relationship between FLLB and English achievement, aiming to help teachers learn more about the status quo of FLLB of senior high school students, guide students to adjust emotions and further improve the efficiency of foreign language teaching and learning.

II. FOREIGN LANGUAGE LEARNING BOREDOM AND ENGLISH LEARNING

As boredom has gradually gained attention in the field of foreign language learning, Li and Dewaele [6] defined foreign language boredom as "a negative, low-activated academic emotion that arises from ongoing foreign language learning activities or tasks, which is perceived as controlled or uncontrolled and/or unimportant, meaningless, or irrelevant" based on the control-value theory. Learners get bored when they perceive the task as uninteresting, meaningless, irrelevant, or over-challenging [7].

Control-value theory posits that academic emotions is affected by control appraisals and value appraisals [8]. Control appraisals refer to the learner's perception of control over academic activities or outcomes, while value appraisals relate to the learner's evaluation of the intrinsic characteristics of the academic activity and the extrinsic utility of the academic activity. There is a negative correlation between perceived value and boredom. When students perceive academic activities or outcomes as valuable, boredom is alleviated. Meanwhile, boredom also depends in part on a sense of control. When academic tasks are within students' control, i.e., when self-control can be realized, positive emotions are easily generated; conversely, when academic tasks are perceived to be beyond one's ability, learners' sense of control over academic tasks decreases, and learning activities are perceived to be worthless, boredom emerges.

FLLB can harm the psychological and behavioral processes of learning [7]. At the psychological level, boredom often co-occurs with a variety of negative emotions, such as depression, irritability, loss of meaning, anxiety, sadness, etc. At the cognitive level, boredom is often accompanied by the laxity of attention, reduced learning engagement, and even distorted time perception; at the behavioral level, boredom can weaken students' motivation to learn, which in turn may induce avoidance or withdrawal behavior.

According to the control-value theory, the above negative effects may further lead to a decline in academic

performance [5]. Long-term penetration of boredom in the educational environment will have a negative impact on students' learning motivation, cognition, participation, interest, curiosity, self-regulation ability, use of learning strategies, performance, and achievement [8]. More precisely, boredom can adversely affect students' academic performance by reducing their motivation, effort, and engagement [9]. At the same time, bored students may fail to find meaning in their learning and lack meaningful or active engagement and participation in classroom tasks or activities, leading to difficulties in concentration. However, at this stage, there is a lack of specialized examination of the effects of boredom on academic performance [5], and two empirical studies could be found to verify the causal relationship between FLLB and decreased academic performance. One was conducted in a university online classroom condition [3], and the other centered on the differences between urban and rural elementary school students [5]. Due to the different psychological characteristics of students at different stages, the findings of the above two studies on college students and primary school students may not be applicable to Chinese high school students, and the generalizability of their findings needs to be further explored.

III. METHODOLOGY

A. Research Questions

The previous researchers recruited their subjects mainly from university students, and concentrated on the measurement, influencing factors, and dynamic changes of FLLB. However, little is known about senior high school students and the effects of FLLB on their academic performance. Moreover, a few clear conclusions have been drawn on the extent to which different dimensions of FLLB are related to Language achievement. Therefore, it is necessary to conduct the present study to examine how FLLB is related to foreign language achievement among senior high school students in an English as a foreign language context. Therefore, the following two specific research questions were formulated:

- 1) What are the profiles of Chinese senior high school students' FLLB in English classes?
- 2) What are the relationships between Chinese senior high school students' FLLB and English achievement?

B. Research Subjects

Convenience sampling was conducted in this study. After obtaining the teacher's consent, an online questionnaire survey was conducted among the students of ordinary classes in Grade One of L Senior High School. A total of 140 questionnaires were sent out and after analysis, 12 invalid questionnaires were eliminated, so 128 valid samples were obtained, of which 59 were male (46.09%) and 69 (53.91%) female. The students in grade one are in the transition period from middle school to high school. During this period, students have not fully adapted to high school life and their emotions fluctuate greatly. Therefore, learning more about the status quo of FLLB of grade one students is crucial for teachers to help students adjust their emotions and further improve the efficiency of foreign language teaching and learning.

C. Research Instruments

This study mainly used questionnaires and tests as research instruments. The Foreign Language Learning Boredom Scale (FLLBS) [7] was used to measure students' boredom in English learning. The scale was developed based on a large sample of question-and-answer and interview data, and includes 32 items measuring seven dimensions: foreign language classroom boredom, under-challenging task boredom, PowerPoint presentation boredom, homework boredom, teacher-dislike boredom, general learning trait boredom, over-challenging meaningless boredom, foreign language boredom. The scale is a 5-point Likert scale, corresponding to a score of 1 (totally disagree) to 5 (totally agree), with higher scores indicating higher levels of boredom.

Whereas, the English achievement, that is, the English exam score, is collected in the final English exam in the second semester of the academic year 2022–2023. The examination, which was organized by the Education Bureau of W city where L High School is located, is set in accordance with the *English Curriculum Standards for High Schools*. The total number of questions is 150, and the objective part of the questions is graded by the marking system while the subjective part is double-graded by two or more teachers from other schools. Before the scoring, teachers had been trained to ensure reliability.

IV. RESULTS AND DISCUSSION

A. The Profiles of Chinese Senior High School Students' FLLB in English Learning

The average scores of 7 items for FLLB were calculated separately. In general, overall high school students' FLLB is at a moderate level as shown in Table 1.

Table 1. Descriptive statistics of FLLB in senior high school students

Туре	N	min.	max.	M	SD
Foreign language classroom boredom	128	1.00	5.00	2.4033	1.18836
Under-challenging task boredom	128	1.00	5.00	2.8391	1.19765
PowerPoint presentation boredom	128	1.00	5.00	3.8385	1.07544
Homework boredom	128	1.00	5.00	2.3926	1.10193
Teacher-dislike boredom	128	1.00	5.00	2.3262	1.18370
General learning trait boredom	128	1.00	5.00	2.3766	1.12316
Over-challenging or meaningless task boredom	128	1.00	5.00	2.9609	1.18360
Foreign language boredom	128	1.00	4.97	2.6431	.95156

Overall, the mean of high school students' level of FLLB in English learning was 2.64 (SD = 0.95). Boredom in English learning is common among high school students, with the mean values of the seven dimensions ranging from 2.33 to 3.84. Among them, the level of teacher-dislike boredom (M = 2.33) was the lowest while the level of PowerPoint presentation boredom (M = 3.84) was the highest.

From the above findings, it can be seen that overall high school students' FLLB is at a moderate level (M = 2.64). The mean of this study is slightly higher than that of Li *et al.*'s [7] study (M = 2.42, SD = 0.88, N = 2223), and this difference may be caused by the difference between the sample size and the subjects of the study. The number of subjects in Li *et al.*'s study was 2223, which is nearly 17 times the number of subjects in this study, more probably to reduce the error. Moreover, the research subjects in the study of Li *et al.* are non-English major students who do not suffer the pressure of the Chinese College Entrance Examination. Therefore, the level of their FLLB is relatively lower compared with senior high school students.

Among the seven dimensions, PowerPoint presentation boredom and over-challenging or meaningless task boredom are the two types of boredom that students experience most and feel most strongly, which echoes the findings of Kruk and Zawodniak [10] that the main factors that contribute to students' FLLB are single teaching tool, boring learning content, inability to find the meaning of learning. According to control-value theory, subjective value appraisals, that is, learners' cognition of the value judgment of academic activities and their outcomes, are one of the reasons for academic emotions [8]. If too many words are thrown onto the slides, or the tasks are beyond the ability of learners, negative value appraisals such as "boring", "uninteresting", and "meaningless" will probably be made, and boredom emerges.

However, the lowest level among the seven dimensions was teacher-dislike boredom (M=2.33), which is inconsistent with the findings of Chapman [11]. His study illustrated that students' attitudes towards their teachers are the most important predictor of boredom. Such a gap is worth noticing and further study will be carried out by increasing the sample size of the students, the number of classes and teachers involved in the questionnaire.

Therefore, teachers are supposed to maximize the value of the slides and guide students to make positive value appraisals. While full of pictures and illustrations, PowerPoint could also be combined with other media resources, such as videos and interactive software to not only meet the needs of "viewing" of students but also cultivate their ability of "viewing". Meanwhile, improvement of teaching methods, reward mechanisms for academic achievement, ways of interaction, task difficulty, etc. should also be taken into consideration. Furthermore, it is also indispensable for teachers to guide students to fully understand both the internal and external value of English learning, improving the overall value appraisals, as well as stimulating motivation.

B. The Relationships between FLLB and English Achievement

The level of senior high school students' FLLB has a low negative correlation with English achievement. Meanwhile, to some extent, the level of FLLB has a negative predictive effect on senior high school students' English achievement.

Pearson correlation analysis showed (see Table 2) that the level of senior high school students' FLLB is negatively correlated with English scores (r = -0.337, p = 0.000). Among the seven dimensions, except PowerPoint presentation boredom (p = 0.346 > 0.05) and teacher-dislike

boredom (p = 0.085 > 0.05), the boredom level of the other five dimensions showed a low negative correlation with English scores.

Table 3 presents that the R^2 value of the determination coefficient of the regression equation is 0.114, indicating that the fitting of the sample is poor. Meanwhile, the independent variable explained only 33.7% of the dependent variable, that is, FLLB could predict only 33.7% of the English scores of the sample of senior high school students. According to Table 4, the F value of the significance test of variance is 16.142, and p = 0.000 < 0.05, suggesting that the overall explanatory variance of the regression model reached the significance level, and the linear regression model can be tested. Furthermore, as can be seen from Table 5, the prediction equation of this regression model is Y = 127.194 - 7.037X (Y is the English score, X is the level of FLLB).

Table 2. The correlation between FLLB and English scores of senior high

]	English scores			
Туре	Pearson correlation	Sig. (two tails)	Number of cases		
English scores	1		128		
Foreign language classroom boredom	-0.322**	0.000	128		
Under-challenging task boredom	-0.302**	0.001	128		
PowerPoint presentation boredom	-0.084	0.346	128		
Homework boredom	-0.413**	0.000	128		
Teacher-dislike boredom	-0.153	0.085	128		
General learning trait boredom	-0.328**	0.000	128		
Over-challenging or meaningless task boredom	-0.206*	0.020	128		
Foreign language boredom	-0.337**	0.000	128		

^{*} At level 0.05 (two-tailed), the correlation was significant.

Table 3. Model summary

R	\mathbb{R}^2	Adjusted R ²	Std. Error of the Estimate	Durbin-Watson
0.337a	0.114	0.107	18.78278	1.115

a Predictor: (constant) FLLB

Table 4. ANOVA

	Sum of squares	DOF	Mean square	F	Sig.
Regression	5694.958	1	5694.958	16.142	0.000b
Residual	44451.917	126	352.793		
Total	50146.875	127			

a Dependent variable: English score

Table 5. Regression results

Unstandardized Coefficients		Standardized Coefficient	_	6:-	
В	Std. Error	Beta	ι	Sig.	
127.194	4.918		25.862	0.000	
-7.037	1.752	-0.337	-4.018	0.000	
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Through correlation analysis and linear regression analysis, this study further explored the predictive effects of FLLB on English achievement. It's found that in general, the level of senior high school students' FLLB has a low negative correlation (r = -0.337) with English achievement, that is to say, the lower the FLLB level of senior high school students, the more they can maintain a positive attitude in English learning, the higher the English scores, and vice versa. It also

^{**} At level 0.01 (two-tailed), the correlation was significant.

b Dependent variable: English score

b Predictor: (constant) FLLB

echoes the previous research findings: students with a lower level of FLLLB have not only a more positive attitude towards foreign language learning but also clear goals and more perseverance in language learning [10]. To be more specific, foreign language classroom boredom, under-challenging task boredom, homework boredom, general learning trait boredom, and over-challenging or meaningless task boredom are significantly negatively correlated with English achievement. However, there is no significant correlation between PowerPoint presentation boredom, teacher-dislike boredom, and English achievement.

The results of regression analysis indicate that the level of FLLB has a negative predictive effect on senior high school students' English achievement to some extent, which echoes the research findings in the context of online English learning in Chinese universities and the context of foreign language classrooms in urban and rural primary schools in China [5, 7]. The samples and contexts of this study and the above two studies were quite different, however, it consistently indicated that students of lower levels of FLLB were more likely to achieve higher English scores. Moreover, it also suggested that the predictive effect of FLLB can transcend the difference between online and offline teaching modes, the difference between the economic and cultural location of urban and rural [5], as well as the difference between higher education and primary education, proving that academic emotion is stimulated by learning process or learning outcomes, and has a significant correlation with academic achievement [8].

V. CONCLUSION

Based on the questionnaire survey, the study investigated the FLLB and English performance of Chinese senior high school students. Despite gaining insight into the relationship between FLLB and English performance, there is still much room for improvement.

Firstly, other regions and samples of students of other ages are yet to be included in the examination to verify the generalizability of the findings. Secondly, the factors affecting students' performance in the process of foreign language learning are complex and diverse, and variables such as self-efficacy and learning strategies also have a moderating effect on English performance, so future research can consider the above factors for more in-depth exploration.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Yingfei Shen did the basic information analysis and wrote the original draft of the paper. Jianfen Ying provided some background information, helped review and edit, and supervised the progress of writing. All authors had approved the final version.

REFERENCES

- M. Pawlak, M. Kruk, J. Zawodniak, and S. Pasikowski, "Investigating factors responsible for boredom in English classes: The case of advanced learners," *System*, vol. 91, 102259, July 2020.
 G. L. Macklem, "Boredom in the classroom: Addressing student
- [2] G. L. Macklem, "Boredom in the classroom: Addressing student motivation, self-regulation, and engagement in learning," in *SpringerBriefs in Psychology*, vol. 1. Cham: Springer International Publishing, 2015.
- [3] C. Li and X. Lu, "Foreign language learning boredom: A scoping review," Foreign Language Education, vol. 43, no. 6, pp. 70–76, Nov. 2022.
- [4] C. Li, "Looking back, looking forward: SLA research from a positive psychology perspective over the past decade (2012–2021)," *Foreign Language Education*, vol 42, no. 4, pp. 57–63, July 2021.
- [5] C. Li, Y. Han, and B. Li, "Foreign language classroom boredom and foreign language achievement of elementary students: An urban-rural comparison," *Foreign Language Education*, vol. 43, no. 3, pp. 50–55, May 2022.
- [6] C. Li and J.-M. Dewaele, "The predictive effects of trait emotional intelligence and online learning achievement perceptions on foreign language class boredom among Chinese university students?" Foreign Languages and Their Teaching, no. 5, pp. 33–44, Oct. 2020.
- [7] C. Li, J.-M. Dewaele, and Y. Hu, "Foreign language learning boredom: Conceptualization and measurement," *Applied Linguistics Review*, vol. 14, no. 2, pp. 223–249, Mar. 2023.
- [8] R. Pekrun, "The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice," *Educational Psychology Review*, vol. 18, no. 4, pp. 315–341, Nov. 2006.
- [9] K. Shao, R. Pekrun, and L. J. Nicholson, "Emotions in classroom language learning: What can we learn from achievement emotion research?" System, vol. 86, 102121, Nov. 2019.
- [10] M. Kruk and J. Zawodniak, "Boredom in practical English language classes: Insights from interview data," in *Interdisciplinary Views on the English Language, Literature and Culture*, L. Szymański, J. Zawodniak, A. Łobodziec, and M. Smoluk Eds. Zielona Góra: Uniwersytet Zielonogórski, 2018, pp. 177–191.
- [11] K. E. Chapman, "Boredom in the German foreign language classroom," Ph.D. dissertation, University of Wisconsin-Madison, Madison, 2013.

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