

Junior school students' foreign language buoyancy, enjoyment, and English achievement: Exploring the connections from a positive psychology perspective

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Abstract. From a positive psychology standpoint, this research investigated the relationship between foreign language buoyancy, foreign language enjoyment, and English academic achievement of 240 junior school students. The results of this survey indicate that learners of foreign languages have higher foreign language buoyancy, and enjoyment and a noteworthy positive association exists among buoyancy, enjoyment and junior school students' academic success. According to the results of the mediating effect test, enjoyment acts as a partial mediating factor between buoyancy and academic achievement. The buoyancy of junior school students' foreign language learning can influence their English learning achievement partly through their personal enjoyment. Teacher-related enjoyment and environment-related enjoyment had no significant effect on academic buoyancy and academic achievement. Meanwhile, this study has some enlightening significance. According to the findings, it gives some pertinent suggestions for the improvement and intervention of junior school students' foreign language learning emotions to junior school students, educators, and parents.

1 Introduction

For a long time, the function of emotion in the realm of second language acquisition has not received much thorough investigation [1]. However, linguistics researchers nationally as well as internationally have gradually come to realize the significance of emotion in learning new languages over the past ten years, thanks to the promotion of emotion research in positive psychology and educational psychology. This has created a wave of foreign language emotion research. Among them, positive emotion attracts more attention because it helps to expand language learners' thinking and vision, improves learners' ability to pay attention to new things, and promotes learners to absorb and construct language resources [2].

Foreign language academic buoyancy (FLAB) and foreign language enjoyment (FLE) have been the concentration of positive psychology research in education. FLAB is the capacity of learners to effectively navigate obstacles encountered in daily academic life, and

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it is a positive adaptive psychological mechanism [3]. FLE refers to the pleasure students feel when learning a foreign language [4]. However, the mediating effect of FLE in the connection between students' FLAB and foreign language learning level has not been paid enough attention. Therefore, this study adopts the mediation model to investigate whether FLE plays a mediating role in the relationship between FLAB and academic achievement, and discusses the relationship between them of junior middle school students in English learning from the positive psychology.

Chinese students often face high pressure and fierce competition. Students will inevitably encounter setbacks or difficulties when learning English. The study aims to deeply understand the precise process of influence of FLAB and FLE, enrich positive psychology theory in foreign language education and lay a foundation for further research.

2 Literature review

2.1 Positive psychology

Maslow introduced the notion of positive psychology first [5]. Unlike traditional psychology, which studies illness, positive psychology focuses on human flourishing and the positive aspects of life, such as happiness, joy, and enjoyment. Seligman and Csikszentmihalyi proposed that positive psychology focuses on three levels of experience: individual positive emotional experience, individual positive personality traits, and how to establish a positive cycle of social organization system [6]. For the first time, it is defined and the scope of research is specified. With the emergence of the "emotional turn", Positive psychology was first used into foreign language instruction by MacIntyre and Gregersen, which has played a positive role in cultivating students' positive experiences [7, 8]. Positive psychology has been used in a variety of fields, including education, forensic science, healthcare, business, and public policy. However, the existing researches mainly focus on the field of mental health education, and sufficient research on the application of these theory in foreign language acquisition is still lacking

2.2 Academic buoyancy

Academic buoyancy is a measurement of students' ability of handling learning obstacles successfully. As a supplementary description of academic resilience, it emphasizes the role of individuals in solving everyday situations from the perspective of positive psychology [3]. Academic buoyancy focuses on a relatively wide range of life events, so it is of great significance for the study of positive personality qualities [9]. Given the prominent position of positive attitude in foreign language education, the use of this perspective is of great significance to relevant research. Despite this, the effects of academic buoyancy and positive emotions on academic achievement have been seldom studied.

2.3 Enjoyment

Enjoyment is a key part of experiencing flow. Flow is a state in which participants are highly engaged in an activity, with physical and mental focus, lack of self-awareness, and poor perception of time, reflecting the human desire for success when facing difficult tasks [10]. This helps participants to continuously improve their task completion and work efficiency, and thus improve their ability to solve problems. According to the study of Gu Junyi et al., FLE has a profound impact on foreign language learning [11]. When students achieve or exceed the expected goal, they will often have a happy mood. The idea of promoting foreign

language learning has been widely accepted. The influence of the mediating factor of FLE on learning outcomes has received increasing attention. Previous studies on FLE mostly focused on higher vocational colleges and college students, but there were few studies on primary and secondary schools, which did not form a research system for the whole school section [12].

2.4 Relationships between foreign language academic buoyancy, enjoyment, and academic achievement

Pekrun interprets the connection between FLAB and the academic level at the cognitive level using the control-value theory [13]. However, previous studies lack the exploration of emotional factors, especially using standpoints of positive psychology. This is although links between enthusiasm for learning, enjoyment of learning, and academic performance have been suggested before. Few empirical studies have examined FLE's mediating effect in the connection between learners' FLAB and foreign language achievement. This study employed a mediation model to ascertain this hypothesis.

2.5 Research question

According to the literature, research questions are put forward.

1. What is the status quo of junior school students' FLAB and FLE?
2. What is the relationship between FLAB, FLE, and academic achievement of junior school students?

3 Methodology

3.1 Participants

This study selects Grade 7 students of middle School A in a city of eastern Jiangsu Province, China to conduct a stratified sampling survey. The teaching level of the school is at the forefront of the city, and the school according to regional enrolment, is divided into intensive classes and ordinary classes, students' learning levels are diverse. These students have taken a citywide unified midterm exam and can collect test scores with unified evaluation standards.

3.2 Research tool

This study will adopt a mixed research method, through a questionnaire survey. It is expected that 200 questionnaires will be collected. The questionnaire is based on Dewaele The FLE Scale and the Martin and Marsh The FLAB Scale combined with China's education and teaching practice to adjust [3, 4]. It consists of two parts. The first section includes items related to the participants' basic information, including name and gender. The second part includes the FLAB scale and the FLE scale.

Both scales are scored on the five-level Likert scale. There were 5 reverse questions. SPSS 22.0 was used for reliability analysis, and the results showed good reliability of the scale and appropriate for additional examination of FLAB and FLE with the Cronbach's α result of 0.907 and 0.916 respectively.

3.3 Data collection and analysis

The study obtained data through random distribution in English lessons. 250 surveys were sent out, and 240 of them were found to be legitimate, yielding an efficiency rate of 96%. Then SPSS 22.0 was used for descriptive statistical analysis, Pearson correlation analysis, and Bootstrap-based mediation effect analysis.

3.4 Hypothetical model

Research has shown that FLAB has a significant positive impact on English learning and it regulates and lessens the effect of harmful elements to safeguard achievement. Therefore, FLAB can lead to favorable learning outcomes by reinforcement of positive experiences like positive emotions, enhancing students' perception of outside assistance and effective manipulation [14]. FLE positively affects English proficiency. Jin & Zhang's [15] study can confirm this hypothesis. Based on this hypothesis, Li et al. [16] referred to the classification of foreign language pleasure, including FLE-private, FLE-teacher, and FLE-atmosphere. In this study, a hypothesis model shown in Figure 1 is established.

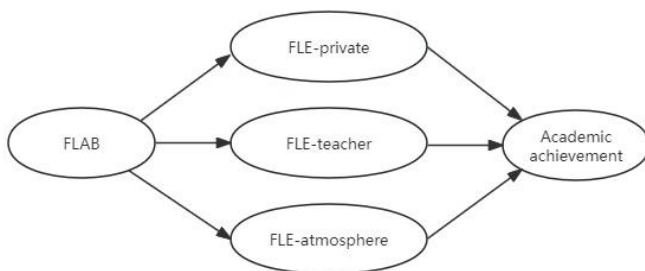


Fig. 1. Hypothesis model.

4 Results and discussion

4.1 Status quo of junior school students' foreign language academic buoyancy and enjoyment

The average FLAB score is the highest, which probably means that most students can keep an optimistic outlook and resilience against academic challenges. This could be explained by the fact that junior school students are equipped to handle negative academic experiences and maintain a positive attitude towards learning. This study supports previous research by Putwain et al. [17]. Students with high buoyancy often overcome setbacks in language acquisition and then achieve higher academic results.

According to the classification of FLE by Li et al., including FLE-private, FLE-teacher, and FLE-atmosphere, three indicators are introduced to analyse [16]. From the specific situation of each dimension, the score from the top to the bottom is FLE-teacher, FLE-private, and FLE-atmosphere. The average FLE-atmosphere is lower than other indicators, and the standard deviation is the largest, which may mean that classroom atmosphere has a great impact on students' pleasure in foreign language learning, but different students have a great difference in their feelings. The data shows that students' pleasure comes mostly from teachers, and enjoy learning the social aspect of the language with peers. However, the results also show that students can benefit from improving their perception of the atmosphere in which they study English. Therefore, creating a positive and supportive learning environment

that enhances the student experience is crucial to fostering their interest and motivation in learning a foreign language.

Table 1. Descriptive statistical analysis.

Item	N	Mini	Max	Mean	SD	Median
Academic achievement	241	40.5	119	102.122	13.861	106
FLAB	241	1	5	4.177	0.728	4.25
FLE-private	241	1.4	5	4.054	0.783	4.2
FLE-teacher	241	2	5	4.708	0.476	5
FLE-atmosphere	241	1	5	3.968	0.908	4
FLE	241	2	5	4.209	0.61	4.27

4.2 Correlations among foreign language academic buoyancy, enjoyment, and academic achievement

In order to look into the correlation between FLAB, FLE, and English achievement, the Pearson correlation test was conducted in this study. Table 2 shows a significant positive correlation between FLAB, FLE, and the academic performance of the participants. It shows that the higher the FLAB, the more positive emotional experience the students have in the English learning process, and the better the English learning performance. Students with high FLAB can fully estimate the difficulties encountered in learning and make greater efforts and spend more time to overcome them, while students with low FLAB first consider their shortcomings and defects. These students are susceptible to negative emotions such as anxiety and depression, and finally produce the psychology of fear and even give up.

The dimensions of FLE differed significantly, with FLE-private receiving the highest score, followed by FLE-atmosphere, and FLE-teacher receiving the lowest score. This indicates that the higher the FLAB of students, the higher their overall FLE, especially FLE-private. This echoes the earlier theory. FLAB and other positive attitudes can help individuals quickly overcome negative emotions and experience more positive emotions [9].

The results in Table 2 also reflect the significant relationship between FLE and its three dimensions and academic achievement. This shows that the more satisfied learners are with themselves and the classroom atmosphere, the more confident they are in their English learning, and the better they will get in the English test. This verifies the view of MacIntyre & Gregerssen [7] that positive emotions help learners analyse problems from a more comprehensive perspective, promote language absorption, and ultimately improve their English proficiency. In addition, Li et al. discovered a strong positive relationship between them [16].

Table 2. Correlation analysis.

	academic achievement	FLAB	FLE-private	FLE-teacher	FLE-atmosphere	FLE
Academic achievement	1					
FLAB	0.355**	1				
FLE-private	0.469**	0.727**	1			
FLE-teacher	0.187**	0.403**	0.427**	1		
FLE-atmosphere	0.283**	0.507**	0.569**	0.421**	1	
FLE	0.429**	0.716**	0.906**	0.633**	0.828**	1
* $p < 0.05$ ** $p < 0.01$						

4.3 Analysis of mediation effect of foreign language enjoyment

Table 3. Mediation effect analysis.

item	c	a	b	a*b	a*b	a*b	a* b	a*b	c'	Test Results
	Total Effect			Mediating Effect	(Boot SE)	(z)	(p)	(95% Boot CI)		
FLAB=>FLE-private=>academic achievement	6.759**	0.782**	7.839**	6.13	0.07	87.09	0	0.191 ~ 0.468	0.564	Full Mediation
FLAB=>FLE-teacher=>academic achievement	6.759**	0.263**	-0.755	-0.199	0.028	-7.095	0	-0.072 ~ 0.040	0.564	Non-significant Mediating Effect
FLAB=>FLE=>academic achievement	6.759**	0.600**	8.148**	4.888	0.069	70.732	0	0.121 ~ 0.401	1.871	Full Mediation
* $p < 0.05$ ** $p < 0.01$										

The mediation effect analysis in Table 3 shows that FLAB has a significant positive impact on FLE-private, FLE-teacher, and FLE-atmosphere, and these pleasure factors act as a mediator between FLAB and academic achievement. Specifically, the positive effect of FLAB on individual pleasure significantly improves academic performance by increasing individual foreign language pleasure. This indicates that cognitive and emotional elements work together to affect learning results. It is worth noting that FLE-teacher and FLE-atmosphere do not significantly affect the English level, indicating that the participants are junior school students who are forming their ideas and ideas. Even if they have a strong sense of identity with the teacher, their attitude towards the teacher does not necessarily translate into actions and results to improve English learning. Even if the teacher is friendly or the teacher-student relationship is harmonious, it does not necessarily improve the student's academic performance. Moreover, the influence of learning environment on English proficiency is not significant. This may be related to the fact that many students in this school despise foreign language learning during investigation.

The mediating effect of FLE was 4.888, which was obtained by subtraction of the direct effect from the total effect, and the 95% confidence interval [0.121, 0.401] obtained by percentile bootstrap method did not contain 0, which further confirmed the significance of the mediating effect. In addition, the Z-value of the test results is 70.732, and the P-value is close to 0, which indicates that the mediating effect of FLE is not only significant, but also very strong. The results indicate that there is Full Mediation, which means that all the positive effects of FLAB on academic performance are achieved through FLE. This finding has important implications for educational practice, as it emphasizes that in the process of improving students' academic performance, in addition to direct instructional interventions, students' foreign language learning experience should be paid attention to and optimized to improve their FLAB and overall academic performance.

5 Conclusion

Based on the analysis results, the author finds that FLAB affects students' emotions and ultimately has a significant impact on academic achievement. Therefore, improving learners' FLAB can help to improve FLE-private and ultimately achieve good learning results. The above analysis provides important implications for educators.

Teachers should strive to reduce the sense of urgency that students experience and treat every student fairly while also respecting individual differences and placing a high value on collaborative learning. By planning interesting and creative lessons and setting up English learning support groups for students to work together to overcome obstacles and enhance their English proficiency, English teachers can increase students' interest in the subject.

Students' success in English language learning depends on their ability to self-regulate and develop a learning plan. Moreover, students should develop positive values towards foreign language learning, participate in classroom activities to boost their confidence, and explore the meaning of foreign language learning. Students need to be self-aware, motivated, and have a growth mindset to achieve academic success in English language learning. To improve their academic achievement in foreign languages, students should learn to self-regulate and develop a study plan that takes into account their self-understanding and positive learning values.

Regular communication between teachers and parents can facilitate understanding of students' academic progress and facilitate collaboration to promote academic achievement. In the long term, FLAB and FLE will not only enable students to better manage their learning difficulties and improve their achievement but will also foster a warm and supportive family environment that enhances students' emotional and social development, ultimately improving their quality of life. It is crucial to maintain a positive outlook toward learning a foreign language and acknowledge that language learning is a gradual process that requires consistent effort.

There are still some shortcomings in this study. Due to the limited time, only one senior school was selected as the research object. To improve the findings' representativeness and trustworthiness, research should expand sample size to include a greater number of schools. Second, the study can concentrate on a wider range of areas, especially those with a less developed and economically significant city. Meanwhile, future studies should further expand the sample size to obtain more comprehensive and accurate research results. In addition, it can be more in-depth analysis by subdividing different groups, such as classification research by gender, age, family background, etc., to obtain more detailed conclusions.

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