

# The Relationship among Chinese High School Students' Listening Metacognitive Awareness, Foreign Language Enjoyment and Listening Performance

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**Abstract.** Although the importance of listening metacognitive awareness in foreign language listening has been widely accepted, so far, there has been little research on its relationship with foreign language enjoyment (FLE) and listening performance. Since listening is an important input language skill in the primary stage of language learning, this study examines the relationships among metacognitive awareness, FLE and listening performance of 331 Chinese senior high school students through Metacognitive Awareness of Listening Questionnaire (MALQ) and the Chinese Version of the Foreign Language Enjoyment Scale. The results demonstrate that: 1) the listening metacognitive awareness of the participants was of medium and high level; 2) the listening metacognitive awareness and listening performance were significantly correlated, and the high and low listening performance groups exhibited significant differences in listening metacognitive awareness; 3) FLE had significant positive effects on listening performance, and listening metacognitive awareness could indirectly facilitate listening performance by affecting FLE, that is, FLE had mediation effect between listening metacognitive awareness and listening performance. Pedagogical suggestions for English listening are provided.

**Keywords:** listening metacognitive awareness; foreign language enjoyment; listening performance.

## 1. Introduction

As an input language skill, listening plays an important role in foreign language learning. With the development of Second Language Acquisition (SLA) in the field of listening, the important role of metacognition has attracted more and more attention from scholars both at home and abroad. However, non-intellectual factors, especially positive academic emotions, are rarely taken into account because they are not directly involved in cognitive process. In recent years, positive psychology (PP) has been introduced into SLA research, and scholars have begun to re-examine the role of positive academic emotion for language learning. However, there is a lack of research related to listening. This study investigated Chinese senior high school students who were in the primary stage of English learning to exam the relationship among listening metacognitive awareness, FLE and listening performance.

## 2. Literature Review

### 2.1 Listening metacognitive awareness

Metacognition was first defined by Flavell (1976) as the monitoring of learning participants' cognitive activities, which mainly includes metacognitive knowledge and metacognitive control (Flavell, 1979; Brown & Palinscar, 1982). In listening, metacognitive awareness generally refers to metacognitive knowledge (Vandergrift et al. 2006) (quoted from Zhang Zhenghou *et al.*, 2013). Flavell (1979) pointed out that metacognitive knowledge is a part of the knowledge about the world stored by people (children and adults) who are cognitive creatures, which is related to individuals and their cognitive tasks, goals, actions and experiences. It has three sub-categories: personal knowledge, task knowledge and strategy knowledge. Wenden (1986, 1998) modified the metacognitive knowledge model of Flavell (1979) from the perspective of linguistics, and proposed that in the field of SLA, personal knowledge is the general knowledge about human factors (age, talent, *etc.*) in the

learning process, and the special knowledge, learning ability, motivation and belief of how human factors affect their own learning; task knowledge refers to the learning participant's understanding of the purpose and requirements of the task; Strategy knowledge refers to learners' knowledge of the effectiveness and applicable conditions of various language learning strategies. Goh (1997) was the first to link metacognitive awareness with second language listening. Through the study of Chinese students' English listening logs, he further analyzed listening metacognitive awareness and found that listening metacognitive awareness plays an important role in improving listening performance. Based on the metacognitive process model proposed by Wenden in 1998, Vandergrift *et al.* designed the metacognitive awareness listening questionnaire (MALQ), which has been widely used. Since then, a large number of relevant studies have indicated that listening metacognitive awareness play a role in learners' listening performance, learning motivation and confidence (Goh & Taib, 2006; Vandergrift & Tafaghodtari, 2010; Shen Yunhua, Zhang Jun, 2016, *etc.*), and has a positive impact on the information processing of foreign language listening (Coskun, 2010). Among them, 'personal knowledge' and 'directed attention' in metacognitive knowledge model are the most significant factors (Yu Cuihong, 2014; Chang Pengyun, 2016). However, previous studies on listening metacognitive awareness lacked the investigation of non-intellectual factors (Deng Qiaoling, 2015), especially positive academic emotions. In recent years, as emotion research has become a new hot spot, people at home and abroad have begun to pay attention to a variety of emotional experiences in second language learning (Dewaele & Li, 2020). Whether metacognitive awareness affects the listening performance indirectly by affecting the positive academic emotion apart from its direct impact on listening performance is worth investigating.

## 2.2 Foreign language enjoyment

MacIntyre & Gregersen (2012) first introduced PP into SLA and proposed that positive emotions can improve learners' ability to focus on new things and help learners receive more language input information. FLE refers to the state in which learners' psychological needs are met, which can release the language learning potential of adults as well as children (Dewaele & MacIntyre, 2014, 2016). It is the core emotion that has attracted much attention in the field of SLA (Teimouri, 2018). Based on Pekrun's (2006) control-value theory, enjoyment is a positive activity-related emotion which can effectively improve learners' cognition, regulate motivation and learning behavior, and contribute to academic achievement. Empirical studies by Dewaele & Alfawzan (2018) and Li Chengchen (2020) demonstrated that FLE would positively predict foreign language achievement. Dong Lianqi and Liu Meihua (2022) found that FLE significantly positively indirectly predicted foreign language achievement through the mediating effect of foreign language use and expectancy component of motivation. At present, the widely accepted FLE measurement tool is the foreign language enjoyment scale (FLES) designed by Dewaele & Macintyre (2014). Based on the conceptual structure FLE of Chinese high school English learners, Li *et al.* (2018) adapted FLES locally and designed the Chinese version of foreign language enjoyment scale (CFLES). The scale has been used in empirical research with Chinese learners as samples (e.g., Wei *et al.*, 2019; Wei Xiaobao *et al.*, 2021). Since affective filtering hypothesis was put forward (Krashen, 1985), negative emotions have been the focus of SLA research at home and abroad. Compared with foreign language anxiety, the research on FLE in China starts late and lacks effective empirical research. In addition, some existing studies only regard enjoyment as the lack of anxiety, ignoring the role of enjoyment itself. Moreover, foreign language teaching has long focused on cultivating learners' cognitive ability, while there is less discussion on the interaction between learners' emotional factors and cognitive factors (dewaele & Li, 2020). In view of the important impact of foreign language enjoyment as a positive academic emotion on learners' thinking-action repertoire, individual happiness, academic process and achievement both in short-term and long-term (Li Chengchen, 2020), how enjoyment interacts with metacognitive awareness in the process of foreign language learning and affect language performance should be discussed.

### 3. Research design

#### 3.1 Research questions

This paper mainly discusses the relationship among Chinese high school students' listening metacognitive awareness, FLE and listening performance. It aims to address the following three research questions:

RQ1: What is the general level of Chinese senior high school students' listening metacognitive awareness and FLE?

RQ2: Is Chinese senior high school students' English listening performance related to listening metacognitive awareness? Are there differences in metacognitive awareness between high-score students and low-score students?

RQ3: What is the relationship among Chinese senior high school students' listening metacognitive awareness, FLE and listening performance?

#### 3.2 Participants

Participants were 331 senior one students in a middle school in Zhejiang province, China, aged from 15 to 18. All participants have been learning English at school since their third year at primary school. Participants were divided into high-score group ( $n = 95$ ) and low-score group ( $n = 94$ ) according to their listening test scores.

#### 3.3 Instruments

##### 3.3.1 Metacognitive Awareness of Listening Questionnaire

The metacognitive awareness of listening questionnaire of this study was modified after MALQ designed by Vandergrift *et al.* (2006). Based on descriptive studies of metacognitive awareness, Vandergrift *et al.* (2006) combined theories of foreign language listening with practice, and designed MALQ after repeated examine and modification (Yu Cuihong, 2014). Its reliability and validity were tested acceptable. Based on the metacognitive knowledge model (Flavell, 1979) and the metacognitive process model (Wenden, 1998), the questionnaire divides listening metacognitive awareness into five sub-categories: 'problem solving', 'planning-evaluation', 'mental translation', 'directed attention' and 'person knowledge'. In this study, the questionnaire was translated into Chinese and slightly adjusted according to the results of the pilot study ( $n = 88$ ). Each item was responded to on a standard 5-point Likert scale ranging from '1 = strongly disagree' to '5 = strongly agree'.

##### 3.3.2 Foreign Language Enjoyment Scale

This study adopted the Chinese Version of the Foreign Language Enjoyment Scale by Li *et al.* (2018), which had ideal reliability and validity. It had subscales of FLE-Private, FLE-Teacher, and FLE-Atmosphere (Li Chengchen, 2020). The options of the scale were in the form of Likert five scale, and the situation of some items was set as "English listening time". Each item was responded to on a standard 5-point Likert scale and some of the item was set as 'While listening English'.

##### 3.3.3 Listening test

The listening scores of this study were the average scores of the participants' English listening scores in the three recent large-scale official exams in their middle school. Its difficulty and question type were equivalent to the English listening of the current national college entrance examination, which reflected listening performance with adequate accuracy. The style of questions was multiple-choice: 5 short dialogues, 5 long dialogues or monologues and 15 questions, which are 20 questions and 30 points in total, and 1.5 points for each question. This study took the average score of three English listening test as the grouping standard: 25 points and above as the high-score group, and 22 and below as the low-score group.

### 3.4 Data collection and analysis

The MALQ and the foreign language enjoyment scale were both printed in paper and distributed and collected by their teachers. The participants needed to fill in the options on the answer sheet. Each answer sheet was pasted with bar code number, and the data collection was completed by machine scanning. After excluding the questionnaires and scales that do not meet the requirements (choosing more or less options), this study collected 276 effective MALQ and 318 foreign language enjoyment scales. In the data processing stage, items 3, 8 and 16 of MALQ were coded in reverse order because the wording is semantically opposite to other items. Besides, three items of ‘mental translation’ also adopted reverse coding because there was a negative correlation between them and listening metacognitive awareness (Vandergrift *et al.*, 2006). According to the proposal of Goh and Hu in 2014, the comprehensive metacognitive awareness level of listening (MALQ score) was calculated by adding the average value of each subscale as the score of five factor variables. Internal consistency of MALQ and the scale was assessed by using Cronbach’s Alpha. The alphas for MALQ, ‘problem solving’, ‘planning-evaluation’, ‘mental translation’, ‘directed attention’, and ‘person knowledge’ were 0.75, 0.82, 0.73, 0.62, 0.69, and 0.61 respectively, indicating that the items could be used in further analysis. All items in the foreign language enjoyment scale were positively worded questions. The foreign language enjoyment level was the sum of each items’ score. The alphas for the Foreign Language Enjoyment Scale, the subscales of FLE-Private, FLE-Teacher, and FLE-Atmosphere were 0.90, 0.86, 0.87, 0.84 respectively, which demonstrated that the items had high reliability and were appropriate for this research. All data were processed by Pearson correlation analysis, independent samples t-test and regression analysis via SPSS 26.0.

## 4. Results and discussion

### 4.1 The general level of listening metacognitive awareness and FLE

The general level of listening metacognitive awareness ( $n = 276$ ) and FLE ( $n = 318$ ) of the participants is illustrated in Table 4.1. On a standard 5-point Likert scale, an average score higher than 3.5 indicates high-frequency, equal to or lower than 2.4 shows low-frequency, and between them indicates medium-frequency (Oxford & Burry-Stock, 1995).

Table 4.1 Descriptive statistics of listening metacognitive awareness and FLE

	Min	Max	M	SD
MALQ score	2.00	4.31	3.1886	0.39086
Problem Solving	1.00	5.00	3.5181	0.76849
Planning-Evaluation	1.00	5.00	3.0116	0.76649
Mental Translation	1.00	5.00	2.7826	0.82697
Directed Attention	1.00	5.00	3.7274	0.77353
Person Knowledge	1.00	5.00	2.8483	0.95008
FLE	1.00	5.00	3.2396	0.78084
FLE-P	1.00	5.00	3.0405	0.94476
FLE-T	1.00	5.00	4.0021	0.87166
FLE-A	1.00	5.00	2.8091	0.99013

Note. FLE-P: ‘FLE-Private’, FLE-T: ‘FLE-Teacher’, FLE-A: ‘FLE-Atmosphere’

Table 4.1 shows that in terms of metacognitive awareness of listening, the score of ‘directed attention’ is the highest ( $M = 3.73$ ), and ‘problem solving’ is followed ( $M = 3.52$ ); ‘mental translation’ scored the lowest ( $M = 2.78$ ). The participants’ MALQ score is at the medium level, and the five types of listening metacognitive awareness are at the medium or high level. In terms of enjoyment,

'FLE-Teacher' was the highest ( $M = 4.00$ ). The general level of FLE ( $M = 3.24$ ), 'FLE-Private' ( $M = 3.04$ ) and 'FLE-Atmosphere' ( $M = 2.81$ ) are at a medium level.

#### 4.2 Correlations between MALQ Factors and listening performance

Table 4.2 is the result of Pearson correlation analysis between participants' MALQ score, five types of listening metacognitive awareness and listening performance.

Table 4.2 MALQ Factors correlations for the Exploratory listening performance (N = 276)

Factor	r	p
MALQ score	0.419***	0.000
Problem Solving	0.256***	0.000
Planning-Evaluation	0.205**	0.001
Mental Translation	-0.078	0.201
Directed Attention	0.285***	0.000
Person Knowledge	0.340***	0.000

Note. \*\*\*  $p < 0.001$ , \*  $p < 0.01$

As shown in Table 2, the participants' MALQ score was significantly positively correlated with their listening performance ( $|r| = 0.419 > 0.4$ ,  $P < 0.001$ ); among the five types of metacognitive awareness of listening, except 'mental translation', there was a significant positive correlation with listening performance ( $P < 0.01$ ). It is noteworthy that among the five dimensions, 'person knowledge' has the highest correlation with listening performance ( $|r| = 0.340 > 0.2$ ,  $P < 0.001$ ), which is consistent with the research results of Deng Qiaoling (2015) and Goh & Hu (2014), that is, 'person knowledge' is the most important correlation factor of listening performance, indicating that self-efficacy, self-confidence and motivation have a positive correlation with listening performance. In addition, 'mental translation' has no significant correlation with listening performance.

In order to investigate whether there are differences in the listening metacognitive awareness level between participants from high-score group ( $n = 95$ ) and low-score group ( $n = 95$ ), this study adopts independent samples t-test (Table 4.3).

Table 4.3 t-test results of MALQ Factors

Factor	F	t	p
MALQ score	1.075	6.916	0.000
Problem Solving	1.709	3.775	0.000
Planning-Evaluation	5.762	2.392	0.018
Mental Translation	6.079	-1.174	0.242
Directed Attention	.297	4.106	0.000
Person Knowledge	3.001	6.801	0.000

Table 4.2 shows that there were significant differences between high-score group and low-score group in MALQ score and four types of listening metacognitive awareness except 'mental translation' ( $P < 0.05$ ). The high-score group exceeded low-score group in MALQ score ( $t = 6.916 > 0$ ), "problem solving" ( $t = 3.775 > 0$ ), "plan evaluation" ( $t = 2.392 > 0$ ), "guiding attention" ( $t = 4.106 > 0$ ) and 'person knowledge' ( $t = 6.801 > 0$ ), which was consistent with the research results of Deng Qiaoling (2015). However, there was no significant difference in 'mental translation' in the five types of listening metacognitive awareness between two groups ( $P = 0.242 > 0.05$ ), which was inconsistent with the research results of Zhang Yongzheng and Yu Cuihong (2015)'s study on undergraduates and Shen Yunhua and Zhang Jun (2016)'s study on postgraduates. Both studies indicated that low-score learners were more dependent on 'mental translation', a strategy which hinders listening comprehension. The reason may be that the participants of this study were senior-one students, who were in the primary stage of English learning and had limited vocabulary and phonetic knowledge. As put forward by Shen Yunhua and Zhang Jun (2016), "the participants did not achieve automation in 'formal-meaning matching' in listening texts", so they were more dependent on translating words

and sentences into mother tongue in order to understand the text. Meanwhile, the listening text capacity was small at this stage, and the time delay of information input and output caused by the semantic transformation between the two languages would not hinder listening comprehension. Yu Cuihong and Zhang Yongzheng (2014) conducted diachronic research on the listening metacognitive awareness and listening performance of English majors and non-English majors in a university for one and a half semesters, and found that ‘mental translation’ had a positive impact on the listening performance at the beginning of the study. With the development of participants’ listening ability, the impact becomes negative. This study shows that ‘mental translation’ has different regulatory effects on listening comprehension at different stages of English learning, which supports the results of the current study.

### 4.3 Correlation analysis between listening metacognitive awareness, FLE and listening performance

Pearson correlation analysis of listening metacognitive awareness, FLE and listening performance is demonstrated in Table 4.4.

Table 4.4 FLE Factors correlations for listening metacognitive awareness, FLE and listening performance (N = 268)

		LP	MALQ Score	PS	PE	MT	DA	PK
FLE	r	0.218**	0.463**	0.570**	0.586**	-0.323**	0.431**	-0.025
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.680
FLE-P	r	0.280**	0.556**	0.600**	0.634**	-0.341**	0.482**	0.080
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.192
FLE-T	r	0.107	0.212**	0.369**	0.273**	-0.179**	0.287**	-0.144*
	p	0.082	0.000	0.000	0.000	0.003	0.000	0.019
FLE-A	r	0.088	0.266**	.368**	0.447**	-0.234**	0.225**	-0.075
	p	0.152	0.000	0.000	0.000	0.000	0.000	0.223

Note. \*\*  $p < 0.01$ , \*  $p < 0.05$ , LP: listening performance, PS: ‘problem solving’, PE: ‘planning-evaluation’, MT: ‘mental translation’, DA: ‘directed attention’, PK: ‘person knowledge’

Previous studies mostly focused on foreign language comprehensive achievement and FLE, most of which reached the conclusion that FLE positively predicted foreign language achievement (Dewaele & Alfawzan, 2018; Jiang & Dweale, 2019; Li Chengchen, 2020, *etc.*). As illustrated on Table 4.4, this study concentrated on the listening module rather than comprehensive English skills and found that the participants’ FLE was significantly positively correlated with their listening performance as well ( $P < 0.01$ ), indicating that FLE not only positively affected their comprehensive foreign language achievement, it was also an important related factor of listening module. Meanwhile, this study found that among the three dimensions of FLE, only ‘FLE-Private’ was significantly correlated with listening performance ( $P < 0.01$ ), indicating that the positive effect of FLE on listening performance was mainly realized by ‘FLE-Private’, while ‘FLE-Teacher’ and ‘FLE-Atmosphere’ had no significant effect ( $P > 0.05$ ). In addition, FLE was positively correlated with MALQ score ( $|r| = 0.463 > 0.4$ ,  $P < 0.01$ ), and the former was positively correlated with other items, except ‘mental translation’ ( $|r| = 0.323 > 0.2$ ,  $P < 0.01$ ) which was negatively correlated. Besides, FLE had no significant correlation with ‘person knowledge’ ( $P > 0.05$ ). Among them, ‘planning-evaluation’ has the most significant correlation with FLE ( $|r| = 0.586 > 0.4$ ,  $P < 0.01$ ), followed by ‘problem solving’ ( $|r| = 0.570 > 0.4$ ,  $P < 0.01$ ). This indicated that the participants’ initiative in the process of organizing, planning, monitoring and adjusting listening activities had a significant positive effect on FLE. The participants’ listening task planning, listening result evaluation, compensatory strategy awareness were the effective predictive variables of FLE.

To sum up, the possible explanations for the relationship among listening metacognitive awareness, FLE and listening performance are as follows: 1) listening metacognitive awareness directly positively affects listening performance, in which ‘person knowledge’ plays a significant role; 2) FLE

directly positively affects listening performance, and 'FLE-Teacher' plays a significant role; 3) Listening metacognitive awareness indirectly affects listening performance by affecting FLE, among which 'problem solving' and 'planning-evaluation' are the most effective. In order to verify the assumptions, multi-linear regression and simple-linear regression were adopted in this study.

Multi-linear regression was conducted on the five types of listening metacognitive awareness, listening performance and FLE. The results are shown in Table 4.5 and Table 4.6. The regression equation was significant ( $P < 0.01$ ), and there was no multicollinearity relationship between independent variables ( $VIF < 5$ ).

Table 4.5 Multi-linear regression of listening metacognitive awareness and listening performance (N = 276)

Dependent variable	Independent variables	R2	F	p	B	beta	t
LP		0.209	13.805	0.000			
	PS			0.030	0.769	0.197	2.185
	PE			0.306	0.309	0.080	1.025
	MT			0.462	0.183	0.051	0.737
	DA			0.291	0.307	0.079	1.057
	PK			0.000	1.071	0.350	6.079

Note. LP: listening performance, PS: 'problem solving', PE: 'planning-evaluation', MT: 'mental translation', DA: 'directed attention', PK: 'person knowledge'

Table 4.5 shows that five types of listening metacognitive awareness can explain 20.9% of the participants' listening performance variation, which is higher than Vandergrift et al. (2006)'s result of 13%. Meanwhile, under the joint action of five types of listening metacognition, 'person knowledge' ( $\beta = 0.350$ ,  $P < 0.01$ ) was the most significant predictor of listening performance.

Table 4.6 Multi-linear regression of listening metacognitive awareness and FLE (N = 268)

Dependent variable	Independent variables	R2	F	p	B	beta	t
FLE		0.405	35.588	0.000			
	PS			0.000	3.483	0.302	3.866
	PE			0.000	4.381	0.387	5.682
	MT			0.166	0.883	0.083	1.388
	DA			0.233	0.888	0.078	1.195
	PK			0.752	-0.142	-0.016	-3.316

Note. PS: 'problem solving', PE: 'planning-evaluation', MT: 'mental translation', DA: 'directed attention', PK: 'person knowledge'

As illustrated in Table 4.6, five types of listening metacognitive awareness predicted the variation of FLE by 40.5%. Meanwhile, when all five types of listening metacognitive consciousness were taken into consideration, only 'problem solving' ( $\beta = 0.302$ ,  $P < 0.01$ ) and 'plan evaluation' ( $\beta = 0.387$ ,  $P < 0.01$ ) had relatively significant impact, indicating that the latter two were effective predictive variables of FLE.

The multi-linear regression analysis of the impact of FLE and MALQ score on listening performance is shown in Table 4.7, and the simple-linear regression analysis of the impact of MALQ score on listening performance is shown in Table 4.8.

Table 4.7 Multi-linear regression of FLE, MALQ score and listening performance (N = 268)

Dependent variable	Independent variables	R2	F	p	B	beta	t
LP		0.182	0.182	0.000			
	FLE			0.679	0.009	0.026	0.414
	MALQ Score			0.000	0.615	0.414	6.593

Note. LP: listening performance

Table 4.8 Simple-linear regression of MALQ score, listening performance and FLE (N=268)

Dependent variable	Independent variable	R2	F	p	B	beta	t
LP		.181	58.761	.000			

	MALQ Score			.000	.633	.426	7.666
FLE		.214	72.220	.000			
	MALQ Score			.000	2.031	.463	8.498

Note. LP: listening performance

Based on the results of regression analysis in Table 4.7 and Table 4.8, the relationship among the three variables was verified, as illustrated in Figure 4.1.

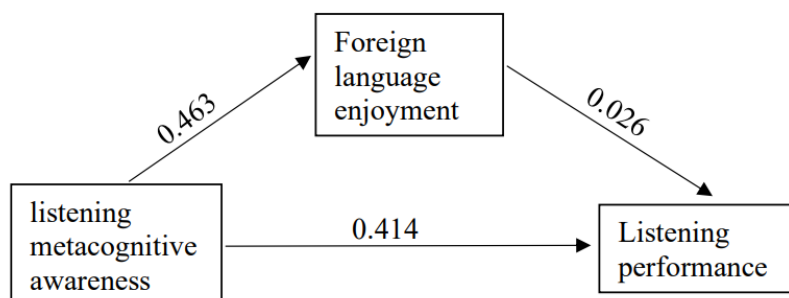


Fig. 4.1 The relationship among listening metacognitive awareness, FLE and listening performance

As indicated in Figure 4.1, the participants' listening metacognitive awareness not only directly boosts their listening performance, but also indirectly promotes their listening performance by stimulates FLE. In other words, FLE has partial mediation effect between listening metacognitive awareness and listening performance.

## 5. Conclusion

This study uses MALQ and FLE scale to collect the quantitative data of listening metacognitive awareness, FLE and listening performance of Chinese senior high school students who were in the primary stage of English learning. The data were analyzed by Pearson correlation analysis, independent samples t-test, simple-linear regression and multi-linear regression. The results showed that there was a significant correlation between listening metacognitive awareness and listening performance, in which 'person knowledge' was an effective variable to predict listening performance; FLE was significantly correlated with listening performance, which was mainly predicted by 'FLE-Private'; FLE had partial mediation effect between listening metacognitive awareness and listening performance, that is, listening metacognitive awareness can also indirectly affect listening performance by affecting FLE. The pedagogical implications of the above conclusions are that for students in the primary stage of language learning, teachers should cultivate students' listening metacognitive awareness in listening class, guide them to make plan for listening tasks, evaluate results, and adopt compensatory strategies appropriately. By this way, students are given the initiative and self-belief to organize, plan, monitor and adjust the listening process, so as to stimulate FLE. The limitation of this study is that the cross-sectional data of this study can only verify the positive predictive effect of listening metacognitive awareness and FLE on listening performance at that stage, while the effect of listening metacognitive awareness and FLE on listening performance is actually a dynamic system. Whether listening metacognitive awareness and FLE can improve learners' listening performance in the real teaching situation needs to be further verified by future research.

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