

# The Effects of Listening Strategy Instruction on Listening Strategy Use and Listening Self-Efficacy of Chinese Non-English-Major Postgraduate Students

Feng-Ming Zhou

School of Foreign Languages and Cultures, Nanjing Normal University, Nanjing, China

Swee Heng Chan

Universiti Putra Malaysia Holdings, Selangor, Malaysia

Moses Samuel

School of Education, Taylor's University, Selangor, Malaysia

**Abstract**—The present study aimed at exploring the effects of listening strategy instruction on listening strategy use (LSU) and listening self-efficacy (LSE) among Chinese non-English-major (NEM) postgraduate students. To this end, a sample of 78 NEM postgraduate students from two intact classes at a public university in China was selected as the research participants. The two classes were randomly allocated to an experimental group (EG,  $n=39$ ) and a control group (CG,  $n=39$ ). The experimental group was instructed with the explicit integrated listening strategy instruction (LSI), while the control group was instructed using the traditional comprehension approach (TCA) without any explicit listening strategy guidance. To assess participants' listening strategy use and listening self-efficacy, the Listening Strategy Questionnaire (LSQ) and the Listening Self-efficacy Questionnaire (LSEQ) were administered before and after the intervention. The study's findings revealed that listening strategy instruction significantly enhanced EG learners' listening strategy use and their listening self-efficacy. The outcomes of this research could provide SL/FL teachers, learners, and curriculum developers with notable insights into teaching listening skills to SL/FL adult learners.

**Index Terms**—listening strategy instruction, listening strategy use, listening self-efficacy, Chinese non-English-major (NEM) postgraduate students

## I. INTRODUCTION

Listening is not only a widespread communicative activity but also a key to language learning (Vandergrift & Goh, 2009). To fully acquire a second language (SL) or foreign language (FL), learners first need to master listening skills. Developing listening comprehension in fact aids learners to gain success in language acquisition through enhancing comprehensible input. Hamouda (2013) also emphasized that listening comprehension offers learners suitable conditions to acquire and develop other language abilities. Despite the vital role of listening comprehension in communication and language learning, SL/FL learners have rarely been taught to listen effectively (Graham, 2017). Listening skills have historically received minimal systematic attention (Emerick, 2019; Goh & Vandergrift, 2021). Over the past few decades, however, there has been a growth in the number of studies conducted in the research field of SL/FL listening comprehension, as evidenced in relevant literature review (e.g., Dalman & Plonsky, 2025; Fathi et al., 2020; Huang & Lin, 2023; Vanderplank, 2013).

In order to prepare learners to grasp the skills of “how to” listen and to improve their listening comprehension, researchers and instructors need to know how listening strategies can be taught actively and systematically. Shannon (2008) stated that listening strategy instruction (LSI) can provide learners with opportunities to explore and apply new listening strategies, helping them become more effective, strategic, and autonomous language learners. Siegel (2015) also argued that many ESL/EFL (English as a second or foreign language) learners have reported increased listening confidence following listening strategy intervention. As such, for ESL/EFL learners, it is crucial to employ effective strategies during English listening activities to enhance their self-efficacy in learning (Carrier, 2003).

Listening in ESL/EFL is a process that involves cognitive, strategic, and affective factors (Liang, 2010). Earlier literature indicates that listening comprehension correlates with listening strategy use (e.g., Bozorgian & Shamsi, 2025; Gu et al., 2009). Additionally, it has been shown that listening self-efficacy, an important affective factor, is significant in listening (Huang et al., 2017; Kasseem, 2015; Yabukoshi, 2021). According to the affective filter hypothesis (Krashen, 1985), affective variables act to impede or facilitate the delivery of input to the language acquisition device. Thus, in

terms of learning to listen, it is worthwhile to explore whether the specific instruction of listening strategies can affect learners' listening strategy use (LSU) and listening self-efficacy (LSE). Besides, in the teaching of EFL in China, there is a lack of listening research aimed at Chinese NEM postgraduate students (Dan, 2015; Lou, 2004). Given the educational background of the fast-expanding enrollment of Chinese NEM postgraduate students and the growing importance of learning English for international communication, there is an urgent need to update knowledge about this target group in the research field of LSI.

As part of a broader project examining various cognitive, strategic, and affective factors in EFL listening, this study examines the effects of LSI on LSU and LSE among Chinese NEM postgraduate students. Two types of listening instructional approaches (listening strategy instruction vs. traditional comprehension approach) were implemented in the experimental group (EG) and control group (CG), respectively. The CG's listening strategy use and listening self-efficacy were measured to provide comparable data against those of the EG. Thus, the present study aims to explore two research questions: 1) Does listening strategy instruction significantly improve Chinese NEM postgraduate students' listening strategy use? 2) Does listening strategy instruction significantly improve Chinese NEM postgraduate students' listening self-efficacy?

## II. LITERATURE REVIEW

### A. SL/FL Listening and Strategy Use

Listening strategy use among SL/FL learners with different listening ability levels has been a focus of listening strategy research. The empirical findings indicated that successful and unsuccessful listeners can be clearly distinguished by the acquisition of listening strategies, especially metacognitive ones (Vandergrift, 2003). Through such strategy learning, language learners can plan their learning process, implement their actions, monitor their progress, and evaluate their accomplishments (Goh & Hu, 2014; Little, 2022). Listeners can be prompted to reflect on and evaluate their listening strategy use, as well as to enhance their knowledge framework. Some studies have confirmed that the use of listening strategies is closely related to the dynamic development of listening ability (e.g., Episiasi et al., 2023; Goh & Taib, 2006; Tosun, 2021). The choice and use of listening strategies influence learners' listening performance. Meanwhile, changes in the proportions of metacognitive and cognitive strategies reflect learners' development of listening ability. For example, Graham et al. (2011) underlined the highly individual nature of strategy use and strategy development, and highlighted the significance of students cultivating a sense of being "in charge" of the listening process, encompassing the knowledge of when and how to employ appropriate strategies. The effectiveness of strategy application depends not only on learners' second-language knowledge but also on their perception abilities, strategic knowledge, and the ability to coordinate the application of multiple strategies (Namaziandost et al., 2019). Therefore, teachers should make full use of their awareness of various learning situations and give overall consideration to learners' differences that could affect teaching. This will enable learners to master the strategic skills that suit their own learning needs and proficiency level (Roussel et al., 2019).

### B. SL/FL Listening and Self-Efficacy

Bandura (1997) defined self-efficacy as beliefs in individuals' capacities to organize and implement the actions necessary to achieve their desired outcomes. Schunk (2003) stated that academic accomplishment can be predicted by self-efficacy, as it largely determines how much effort learners are willing to put into learning tasks. Paying greater attention to the role of listening self-efficacy, Graham and Macaro (2008) conducted a program of strategy instruction to investigate its effects on learners' listening comprehension and self-efficacy beliefs. The findings revealed that in some aspects of listening self-efficacy, the EG learners who had obtained feedback benefited the most. Still, the benefits were not as significant as predicted when compared with the CG learners. Aiming to examine the relationship among listening strategy use, listening performance, and self-efficacy, Kassem (2015) conducted a study in Egypt with 84 English-major sophomore students. The results revealed that participants' listening strategy use correlated significantly with their listening proficiency and listening self-efficacy.

Meanwhile, a study by Tabrizi and Saeidi (2015) investigated the interrelationships among EFL learners' self-efficacy, autonomy, and listening comprehension. One primary finding of the study showed a positive relationship between learners' listening self-efficacy beliefs and their listening comprehension performance. Later, Huang et al. (2017) surveyed 510 EFL learners from five universities in southwest China and central China on a similar issue. The study indicated that learners' listening self-efficacy was the most significant predictor of listening proficiency, followed by other relevant variables. The findings confirmed a strong linkage between listening self-efficacy and listening proficiency among the Chinese EFL university students. Canaran et al. (2024) also confirmed that learners with a higher level of self-efficacy in SL/FL listening are more likely to attain better performance in listening comprehension.

### C. Listening Strategy Instruction

Several scholars (e.g., Chambers, 2007; Field, 2008; Graham, 2006) have noted that in many language classrooms, listening is treated as an activity to be "delivered" rather than a skill to be developed in its own right. Surveys have shown that teachers tend to DO listening activities or tests with their learners rather than TEACH them how to listen (Field, 2008; Graham & Santos, 2015). Thus, listening is regarded primarily as a test usually based on a textbook

exercise. Field (2008) called this practice the “Comprehension Approach” (CA), and he contended that it is of little benefit to the development of listening ability. The CA assumes that as long as learners are exposed maximally to listening material, they can enhance their listening skills. The CA does provide learners with abundant opportunities to practice listening. However, as highlighted by Lynch (2009), the CA attaches too much importance to the testing context and learners’ faculty of memory, thus possibly leading to boredom in the classroom and a less engaging learning atmosphere.

Additionally, the CA cannot offer much help in transferring learning skills from one task to another (Field, 2008). In recent decades, various listening-teaching methods have been under review (Nguyen, 2018). Some scholars (e.g., Graham, 2017; Goh, 2010; Li et al., 2022) have advocated that instruction in listening should receive greater research attention rather than being ignored as something that develops on its own. Specifically, focus should be placed on language learners about how to learn, and language teachers should learn how to facilitate the learning process. As such, in the field of listening pedagogy, listening strategy instruction is especially necessary and can develop learners’ strategic abilities to comprehend spoken SL/FL input, which is the basis of much language learning.

Among the studies to solve the problems in listening instruction, some researchers conducted listening strategy instruction as one approach to the teaching of listening (e.g., Goh, 2002; Graham, 2017; Ngo, 2019; Vandergrift & Baker, 2015; Vandergrift & Tafaghodtari, 2010). It has been found that listening strategy instruction can broaden learners’ repertoire of listening strategies and improve learners’ listening proficiency. Besides, listening strategy instruction can provide learners with opportunities to explore and apply listening strategies, helping them become more effective, strategic, and autonomous language learners (Su, 2003). Therefore, conducting listening strategy instruction in SL/FL listening classes has been recommended by several researchers (e.g., Vandergrift, 2004; Zhang et al., 2022; Huang & Lin, 2023).

According to the affective filter hypothesis (Krashen, 1985), affective variables can act to impede or facilitate the delivery of input to the language acquisition device. Earlier literature indicates that listening comprehension correlates with affective factors such as listening self-efficacy. However, more explorations are needed especially in the area of systematic classroom intervention, as the studies concerning the impact of LSI on listening self-efficacy have shown varied results. Some studies have reported a positive effect on enhancing listening self-efficacy (e.g., Graham, 2007; Graham & Macaro, 2008; Milliner & Dimoski, 2019), while others have demonstrated no effect or a nonsignificant effect (e.g., Fathi et al., 2020; Khosroshahi & Merç, 2020; Simasangyaporn, 2016).

Carrier (2003) states that it is important for ESL/EFL learners to employ effective strategies during their listening activities. Compared with the progress made in research investigating strategies that listeners use (e.g., Episiasi et al., 2023; Goh, 2002; Goh & Hu, 2014; Graham & Santos, 2013; Tosun, 2021), the number of studies on listening strategy instruction is still relatively small (e.g., Carrier, 2003; Siegel, 2015; Ngo, 2019; Fathi et al., 2020). In the case of China, only a small number of papers have been published in the key academic journals concerning the instruction of listening strategies (e.g., Chang et al., 2016; Dong & Li, 2009; Lou, 2004; Su, 2003). Besides, studies on listening strategy instruction in or outside China have mainly been conducted among middle school students, undergraduates or learners from English language institutes (e.g., Borhany et al., 2015; Lin, 2019; Lotfi et al., 2016; Su, 2003; Yang, 2018). The relevant research on LSI is particularly limited in the context of EFL learning among Chinese NEM postgraduate students (e.g., Dan, 2015; Liu et al., 2009; Lou, 2004). Furthermore, the effects of listening strategy instruction on listening strategy use (LSU) or listening self-efficacy (LSE) are still under researched and existing research has had incongruent results (e.g., Fathi et al., 2020; Graham & Macaro, 2008; Kaivanpanah et al., 2020; Khosroshahi & Merç, 2020; Milliner & Dimoski, 2019; Simasangyaporn, 2016). Thus, the present study aims to identify effective instructional methods to help NEM postgraduate students grasp effective listening strategies and enhance their self-efficacy, thereby developing their autonomy in the EFL listening learning process.

### III. METHODOLOGY

#### A. Participants

The participants of this study were 78 non-English-major postgraduate students at a public university in China. The non-probability purposive sampling technique was employed to facilitate sampling, given the researcher’s familiarity with the sampling environment. The chosen participants included both female ( $n = 62$ ) and male ( $n = 16$ ) learners. The age group (21-25 years old) included 71 students, and the age group (26-29 years old) included 7 students. On average, the participants have learnt English for about 13 years. None of them reported having received systematic listening strategy instruction before. The two intact classes were randomly assigned as an experimental group ( $n = 39$ ) and a control group ( $n = 39$ ).

#### B. Instruments

Two questionnaires, namely the Listening Strategy Questionnaire (LSQ) and the Listening Self-efficacy Questionnaire (LSEQ), were used in the present study. The two questionnaires were piloted respectively among two groups of students (71 participants per group) before use. The participants were newly enrolled NEM postgraduates with a similar educational background and were not involved in the experiment. The questionnaires were administered to them for initial data collection, and the reliability indices of the two questionnaires were subsequently checked. The

results of the pilot study showed that the two scales were applicable to the experiment and demonstrated strong reliability. In addition, the content validity of the two scales was assessed and approved by two content experts during the pilot study. All the experts are professors with at least 30 years of EFL teaching and research experience and are academically qualified.

(a). *College English Test Band-4 (CET-4)*

To provide the background information on the English language proficiency level, the CET-4 scores of the participants were reported in the study. CET-4, a large-scale and high-stakes English language proficiency test, has been administered in China for over three decades and taken by over 18 million university students annually (Yu & Jin, 2015). As an English test with the most test-takers in the world, CET-4 has been proven to have high reliability and validity (Jin & Yang, 2018). In the current study, all subjects had passed the CET-4 before enrolling as postgraduate students at the university. Based on their self-reported CET-4 scores in their class profiles, an independent-samples t-test was conducted to assess the homogeneity of the two groups' general English proficiency. The results (see Table 1) showed that no statistically significant difference existed between the mean scores of the EG ( $M = 514.05$ ,  $SD = 51.95$ ) and the CG ( $M = 514.95$ ,  $SD = 39.95$ );  $t(76) = -.86$ ,  $p > .05$ . As such, the two classes were at the similar level in the general English proficiency before the intervention.

TABLE 1  
GENERAL ENGLISH PROFICIENCY (CET-4 SCORE) FOR EG AND CG

Groups	N	M	SD	t	Sig.
Experimental	39	514.05	51.95	-.86	.932
Control	39	514.95	39.95		

(b). *Listening Strategy Questionnaire (LSQ)*

The instrument employed in the investigation of listening strategy use was the Listening Strategy Questionnaire (LSQ), which uses a 5-point Likert-type scale developed from other similar listening strategy questionnaires (e.g., Dong, 2016; Harris, 2007; Piamsai, 2014; Vandergrift & Tafaghodtari, 2010; Zhu, 2010). The researcher's experience in teaching EFL also informed the development of the LSQ. The LSQ included 56 items that explored learners' use of listening strategies within four constructs: *metacognitive strategies* (19 items), *cognitive strategies* (25 items), *social strategies* (6 items), and *affective strategies* (6 items). To ensure that each Likert-type item was understandable to participants, the LSQ was translated into Chinese by the principal researcher of the current study. Two domain experts (in the field of translation and EFL research) verified the translation's accuracy, and subsequent revisions were made where necessary. The LSQ was administered to the participants twice (before and after the listening instruction program). The reliability coefficient of the LSQ, as measured by the Cronbach's alpha formula, was .92 in the current study.

(c). *Listening Self-Efficacy Questionnaire (LSEQ)*

To measure the listening self-efficacy of the subjects, the present study employed the Listening Self-efficacy Questionnaire (LSEQ), which was adapted from a synthesis of the Listening Self-efficacy Questionnaire (LSEQ) developed by Kassem (2015) and the Self-efficacy Questionnaire by Graham and Macaro (2008). The LSEQ consisted of 40 items categorized into six dimensions: (1) *Progress* (9 items), measuring perceptions of improvement in listening performance; (2) *Observational Comparison* (4 items), assessing perceived performance relative to peers; (3) *Physiological States* (8 items), evaluating internal feelings during listening; (4) *Strategic Awareness* (6 items), measuring awareness of listening strategies; (5) *Facing Challenges* (8 items), assessing willingness to tackle challenging tasks; and (6) *Anticipation* (5 items), evaluating confidence in future improvement. To ensure that each Likert-type item is understood by the participants, the LSEQ was translated into Chinese by the principal researcher of the current study. Two domain experts (in the field of translation and EFL research) verified the translation's accuracy and subsequent revisions were made where necessary. The LSEQ was administered to the participants twice (before and after the listening instruction program). The reliability coefficient of the LSEQ, as measured by the Cronbach's alpha formula, was .96 in the current study.

(d). *Research Ethics*

Approval to conduct the research project was obtained from the university's Research Ethics Committee. Before the listening instruction program began, the participants were briefed about the procedures and purposes of the research. Then, they signed the informed consent forms which allowed the researcher to analyze and report the collected data. The participants' cooperation in this research was entirely voluntary at all stages of the study, and their anonymity and personal information were strictly protected throughout the project.

C. *Data Collection*

All participants in the EG and CG of this research project were enrolled in a 17-week EFL listening course (held once a week, with 80 minutes allocated to listening practice) during the first academic year of their postgraduate studies. The

intervention program lasted 13 weeks (from the 3rd to the 15th). The listening materials adopted in this listening course included the designated textbook (Li, 2012), some supplementary audio files based on daily-life listening activities, and some video clips (about 140 words/minute, 1-3 minutes). Other supplementary materials involved model listening practice test papers. Both the EG and the CG were taught using the same textbook and identical supplementary listening materials. Only the EG was subject to the instruction on implicit and integrated listening strategies.

Specifically, the intervention program for the EG was based on a six-stage instructional model. It was adapted from models proposed by Oxford (1990), O'Malley and Chamot (1990), Su (2003), and Zhu (2010). The six stages involved preparation, presentation, practice, evaluation, revision, and expansion. In the present study, the 80-minute listening class for the EG was divided into two consecutive sessions (40 minutes per session). Each session encompassed three parts:

The first part involved 10 minutes of pre-listening activities, focused on preparation and presentation. The activities were aimed at raising strategic consciousness. The participants first discussed the topic under the teacher's guidance, and their schema or background knowledge was activated during the discussion. Then the teacher related the conversation to the specific strategies introduced and defined. With a think-aloud method, the teacher modeled the utilization of the strategies and further explained in detail as to how the strategies may help learners comprehend the oral input.

The second part was conducted within the duration of 20 minutes with the while-listening activities covering the practice of listening strategies that are newly taught. Participants were given opportunities to practice the new strategy during the listening tasks. Then, the learners and the teacher continuously summarized the lesson's main points. The learners also discussed with peers some questions that require further thought based on the listening content.

The third part was the 10-minute post-listening activities covering evaluation and revision. The subjects in the experimental group checked their understanding of the listening material, evaluated the effectiveness of the listening strategy used, and exchanged opinions on the topic and the strategy use. Based on the discussion, they would make revisions to the strategies to be deployed in future listening tasks.

It should be noted that when each strategy instructional session began, the previously taught strategies were quickly reviewed and discussed again to refresh the prior learning on strategy use. With increased awareness of listening strategy use, learners were further guided to reinforce and coordinate the use of multiple strategies in the listening comprehension process.

Meanwhile, the CG also attended a similar level listening course for 17 weeks. Both groups underwent 13 weeks of instruction (from the 3rd to the 15th). The difference between the two groups was that the CG received no listening strategy instruction, whether explicit or implicit. Unlike the EG, the CG received only the traditional teaching procedure for listening materials, usually called the Listen-Answer-Check Approach (Vandergrift, 2004) or the Comprehension Approach (Field, 2008). Such an instructional practice (named as the traditional comprehension approach, or TCA in this study) in the CG listening class entailed presenting learners with a recorded passage that lasts around two or three minutes, then using a comprehension exercise to assess their comprehension of the material. As a follow-up, the teacher shared the correct answers with the class. The same procedure was repeated for the different listening texts.

Apart from the listening instruction and practice in class, both groups experienced extensive exposure to out-of-class listening activities. The participants had to complete the same outside-class listening assignments chosen by the instructor and were encouraged to practice the listening materials. At the same time the EG subjects were asked to expand the use of their listening strategies and submit learning journals every two weeks about their learning gains with listening strategy use. The CG subjects just needed to finish the out-of-class listening assignments without having to employ listening strategies or submit learning journals.

#### D. Data Analysis

To answer the research questions, the gathered data were analyzed using IBM SPSS 26. A one-way between-groups analysis of covariance (ANCOVA) was performed to test whether statistically significant differences existed between the EG and CG on LSU and LSE, respectively. Pituch and Stevens (2016) claimed that in a two-group pretest-posttest design, the pre-test is generally correlated with subjects' post-treatment scores. Pallant (2016) argued that ANCOVA is appropriate for evaluating the impact of an intervention or experimental manipulation while controlling for pre-test scores. For each variable in this study, the pre-test scores were used as a covariate to "control" for pre-existing differences between the experimental and control groups. Besides, paired-samples t-tests were also conducted to show the within-group change from the pre-test to the post-test for each variable, respectively.

## IV. RESULTS

### A. Result of RQ1

RQ1: Does listening strategy instruction significantly improve Chinese NEM postgraduate students' listening strategy use?

To explore the impact of the two different listening instructional approaches (LSI vs. TCA) on listening strategy use (LSU) for the experimental and control groups, respectively, the results of a paired-samples t-test on listening strategy use (LSU) served as the baseline data (see Table 2). The paired-samples t-test results indicated a statistically significant

increase in the LSU mean score for the EG. Table 2 shows that the EG’s LSU mean score increased from 2.98 to 3.21 after the intervention, a difference that was statistically significant ( $MD = -.23, t = -4.27, p < .001$ ). On the other hand, although the CG’ LSU mean score also increased from 2.97 to 3.04 after the intervention, this change was not statistically significant ( $MD = -.07, t = -1.36, p > .05$ ).

Additionally, a one-way between-groups ANCOVA was conducted to compare the effects of the two different listening instructional approaches on the LSU of the two groups, respectively. The type of listening instruction (LSI vs. TCA) was the independent variable, and the dependent variable was the post-intervention LSU mean scores. The pre-intervention LSU mean scores were used as a covariate in the ANCOVA. Preliminary analyses indicated that the assumptions of normality, homogeneity of variance, reliability of the covariate, linearity, and homogeneity of regression slopes were not violated. The ANCOVA results (see Table 3) showed that there was a statistically significant difference between the EG and CG on the post-intervention LSU scores ( $F(1, 75) = 4.83, p = .031, \text{partial eta squared} = .06$ ). Hence, these results suggested that LSI had a more facilitative effect on the LSU in the EG subjects than in the CG subjects who were taught with TCA.

TABLE 2  
PAIRED-SAMPLES T-TEST (PRE- AND POST-INTERVENTION LSU DATA)

Groups	Pre-intervention			Post-intervention			MD	t	Sig.
	N	M	SD	N	M	SD			
Experimental	39	2.98	.42	39	3.21	.43	-.23	-4.27	.000***
Control	39	2.97	.33	39	3.04	.40	-.07	-1.36	.182

\*\*\*  $p < .001$

TABLE 3  
ANCOVA RESULTS FOR POST-INTERVENTION LSU DATA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5.784 <sup>a</sup>	2	2.892	27.128	.000	.420
Intercept	1.341	1	1.341	12.578	.001	.144
Pre-intervention LSU	5.221	1	5.221	48.977	.000	.395
Listening Instruction	.515	1	.515	4.832	.031	.061
Error	7.995	75	.107			
Total	775.609	78				
Corrected Total	13.778	77				

B. Result of RQ2

RQ2: Does listening strategy instruction significantly improve Chinese NEM postgraduate students’ listening self-efficacy?

To explore the impact of the two different listening instructional approaches (LSI vs. TCA) on listening self-efficacy (LSE) for the EG and CG, the results of a paired-samples t-test on listening self-efficacy (LSE) served as the baseline data (see Table 4). The paired-samples t-test results indicated a statistically significant increase in the LSE mean scores for both groups. Table 4 shows that the EG’s LSE mean score increased from 2.87 to 3.16 after the intervention, which was statistically significant ( $MD = -.29, t = -4.99, p < .001$ ). Likewise, the CG’s LSE mean score increased from 2.76 to 2.85 after the intervention, which was also statistically significant ( $MD = -.09, t = -2.55, p < .05$ ).

Additionally, a one-way between-groups ANCOVA was conducted to compare the impacts of the two different listening instructional approaches on the LSE of the two groups, respectively. The independent variable was the type of listening instruction, and the dependent variable was the post-intervention LSE mean scores. The pre-intervention LSE mean scores were used as a covariate in the ANCOVA. Preliminary analyses indicated that the assumptions of normality, homogeneity of variance, reliability of the covariate, linearity, and homogeneity of regression slopes were not violated. The ANCOVA results (see Table 5) showed that there was a statistically significant difference between the EG and CG on the post-intervention LSE scores ( $F(1, 75) = 12.69, p = .001, \text{partial eta squared} = .15$ ). Hence, these results suggested that LSI had a more facilitative effect on the LSE in the EG subjects than in the CG subjects who were taught with TCA.

TABLE 4  
PAIRED-SAMPLES T-TEST (PRE- AND POST-INTERVENTION LSE DATA FOR EG AND CG)

Group	Pre-intervention			Post-intervention			MD	t	Sig.
	N	M	SD	N	M	SD			
Experimental	39	2.87	.51	41	3.16	.48	-.29	-4.99	.000***
Control	39	2.76	.56	39	2.85	.51	-.09	-2.55	.015*

\*\*\*  $p < .001, *p < .05$

TABLE 5  
ANCOVA RESULTS FOR POST-INTERVENTION LSE DATA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	14.823 <sup>a</sup>	2	7.412	95.573	.000	.718
Intercept	1.808	1	1.808	23.318	.000	.237
Pre-intervention LSE	12.954	1	12.954	167.042	.000	.690
Listening Instruction	.984	1	.984	12.685	.001	.145
Error	5.816	75	.078			
Total	725.192	78				
Corrected Total	20.640	77				

## V. DISCUSSION

One research aim in the present study was to investigate whether listening strategy instruction improves listening strategy use (LSU) among Chinese NEM postgraduate students. The findings revealed statistically significant differences in mean scores for LSU between the EG and the CG. It could be inferred that the EG subjects had employed more strategies after receiving listening strategy instruction than those without it. This result aligned with Sotoudeh's (2013) argument that listening strategy instruction expands learners' strategy repertoire. As a result, learners were able to use appropriate strategies in listening task completion more successfully.

The findings of this study are consistent with those of some prior studies on LSU. For instance, Ngo (2019) showed that students reported using strategies more often and more appropriately after 11 weeks of strategy instruction. Irgin and Erten (2020) confirmed that listening strategy instruction encourages young learners to use both cognitive and metacognitive strategies and, at the same time, contributes to the awareness of using suitable listening strategies in related activities. The findings of the present study also aligned with those of other studies conducted in the Chinese EFL context (Dan, 2015; Huang & Lin, 2023), confirming the facilitating effect of listening strategy instruction.

Another aim of the present study was to investigate whether listening strategy instruction helps Chinese NEM postgraduate students to enhance their listening self-efficacy (LSE). This study found a statistically significant difference in the LSE mean scores between the two groups. In other words, the EG subjects significantly enhanced their LSE after receiving LSI, aligning with Graham's (2006) stance that SL/FL learners were able to gainfully apply the strategies learnt in the process of listening comprehension. By employing the strategies taught in LSI, such as Advance Organization, Predicting, and Resourcing, learners' sense of personal control in the listening process was enhanced, which in turn contributed to a higher listening self-efficacy.

The finding also concurs with some other studies. For instance, Graham and Macaro (2008) found that after immersion in a listening strategy instruction program, 68 lower-intermediate learners of French in England improved not only their listening proficiency but also their confidence in learning. Graham (2011) further argued that self-efficacy is essential for the development of proficient listening skills and that LSI can enhance self-efficacy. According to Goh and Taib (2006), strategy instruction that engaged learners in reflecting on and discussing strategy use not only led to improved listening comprehension and strategic knowledge, but also to boosted confidence in listening. The study of Milliner and Dimoski (2024) also reported that lower-proficiency EFL learners experienced a noticeable growth in self-confidence after the listening instructional intervention. The knowledge gained from LSI and its subsequent mastery in listening tasks could serve as key resources for enhancing the EG subjects' listening self-efficacy. However, the findings of the current research were at variance with those of some other studies (e.g., Fathi et al., 2020; Khosroshahi & Merç, 2020; Simasangyaporn, 2016) that found no significant impact of listening strategy instruction on learners' listening self-efficacy. As such, this field of study warrants greater research attention to provide more empirical details on the underlying constructs that may affect EFL listening success across different contexts.

## VI. CONCLUSION

This study specifically explored the effects of listening strategy instruction (LSI) on listening strategy use (LSU) and listening self-efficacy (LSE) among Chinese non-English-major (NEM) postgraduate students who had a basic level of English proficiency (as indicated by their CET-4 results). The findings demonstrated statistically significant differences between the EG and CG on the LSU and LSE. The employed strategy instruction model proved effective in developing learners' LSU and enhancing their LSE. The present study enlightens ESL/EFL instructors on how to promote and coordinate learners' development in the strategic and affective domains related to listening more effectively in ESL/EFL situations. It can also contribute to the enhanced awareness among teachers on how they can strategize their roles as listening comprehension instructors to university-level ESL/EFL learners.

Though the research yields valuable insights into matters of listening strategy instruction, it is prudent to note that the present study has several limitations. Firstly, this study was conducted among only 78 NEM postgraduate students in the field of social sciences at a public university in Eastern China, which limits the selection of the research site and the sampling of the population. Generalizing the results of this study to all Chinese NEM postgraduate students should be treated with caution. Secondly, the overall efficacy of LSI was constrained by the time available for program delivery. The participants in the present study attended a listening instruction program that lasted only 13 weeks in a semester,

which may have limited the potential development of more positive outcomes attributable to the strategy instruction.

Considering the limitations presented, some recommendations are offered for future research directions. Firstly, a larger sample size, representing diverse disciplinary populations, is recommended for future comparative studies to achieve better representation. Secondly, an extended period of LSI could prove to be more effective. A longer period of instruction and follow-up in tracing the development of learners' linguistic foundations and strategic knowledge could yield more precise data on learners' internalized listening strategy use and the manifestations of listening self-efficacy in successful ESL/EFL learning.

## REFERENCES

- [1] Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman and Company.
- [2] Borhany, M., Tahiri, A., & Tous, M. D. (2015). The impact of explicit, integrated instruction of listening comprehension strategies on EFL learners' L2 listening comprehension and their overall strategy use. *Journal of Applied Linguistics and Language Research*, 2(8), 128–144.
- [3] Bozorgian, H., & Shamsi, E. (2025). A review of research on metacognitive instruction for listening development. *International Journal of Listening*, 39(1), 1–16.
- [4] Canaran, Ö., Bayram, I., Doğan, M., & Baturay, M. H. (2024). Causal relationship among the sources of anxiety, self-efficacy, and proficiency in L2 listening. *International Journal of Listening*, 38(2), 105–117.
- [5] Carrier, K. A. (2003). Improving high school English language learners' second language listening through strategy instruction. *Bilingual Research Journal*, 27(3), 383–408. <https://doi.org/10.1080/15235882.2003.10162600>
- [6] Chambers, G. (2007). Developing listening skills in the modern foreign language. In N. Pachler & A. Redondo (Eds.), *A practical guide to teaching modern foreign languages in the secondary school* (pp. 50–57). Routledge.
- [7] Chang, P. Y., Hao, M., & Zhang, L. J. (2016). Yuan ren zhi ce lue jiao xue fa dui ying yu ting li ce lue shi yong ji ting li feng ge de ying xiang [The influence of metacognitive strategy teaching method on English listening strategy use and listening style]. *Wai yu jie*, 174(3), 81–88.
- [8] Dalman, M., & Plonsky, L. (2025). The effectiveness of second-language listening strategy instruction: A meta-analysis. *Language Teaching Research*, 29(3), 1039–1068. <https://doi.org/10.1177/13621688211072981>
- [9] Dan, Y. (2015). Yi xue yuan fei ying yu zhuan ye yan jiu sheng ying yu ting li ce lue yan jiu [A study on English listening strategies for non-English major postgraduate students in medical colleges]. *Tai yuan cheng shi zhi ye ji shu xue yuan xue bao*, 6, 86–87.
- [10] Dong, J. H., & Li, L. X. (2009). Wo guo ying yu ting li ce lue yan jiu 15 lian [Retrospect and prospect of study on English listening strategies in China in the recent 15 years]. *Xi bei nong lin ke ji da xue xue bao* (Social science edition), 9(4), 123–126.
- [11] Dong, J. H. (2016). A dynamic systems theory approach to development of listening strategy use and listening performance. *System*, 63, 149–165. <https://doi.org/10.1016/j.system.2016.10.004>
- [12] Emerick, M. R. (2019). Explicit teaching and authenticity in L2 listening instruction: University language teachers' beliefs. *System*, 80, 107–119. <https://doi.org/10.1016/j.system.2018.11.004>
- [13] Episiasi, Mujiyanto, J., Suwandi, & Hartono, R. (2023). Exploring the effects of metacognitive strategy on EFL students' listening performance in Indonesia. *The New Educational Review*, 72, 176–187.
- [14] Fathi, J., Derakhshan, A., & Torabi, S. (2020). The effect of listening strategy instruction on second language listening anxiety and self-efficacy of Iranian EFL learners. *SAGE Open*, 10(2), 1–13. <https://doi.org/10.1177/2158244020933878>
- [15] Field, J. E. (2008). *Listening in the language classroom*. Cambridge University Press.
- [16] Goh, C. C. M. (2002). Exploring listening comprehension tactics and their interaction patterns. *System*, 30(2), 185–206. [https://doi.org/10.1016/S0346-251X\(02\)00004-0](https://doi.org/10.1016/S0346-251X(02)00004-0)
- [17] Goh, C. C. M. (2010). Listening as process: Learning activities for self-appraisal and self-regulation. In N. Harwood (Ed.), *English language teaching materials: Theory and practice* (pp. 179–206). Cambridge University Press.
- [18] Goh, C. C. M., & Hu, G. W. (2014). Exploring the relationship between metacognitive awareness and listening performance with questionnaire data. *Language Awareness*, 23(3), 255–274. <https://doi.org/10.1080/09658416.2013.769558>
- [19] Goh, C. C. M., & Taib, Y. (2006). Metacognitive instruction in listening for young learners. *ELT Journal*, 60(3), 222–232. <https://doi.org/10.1093/elt/cc1002>
- [20] Goh, C. C. M., & Vandergrift, L. (2021). *Teaching and learning second language listening: Metacognition in action* (2nd ed.). Routledge. <https://doi.org/10.4324/9780429287749>
- [21] Graham, S. (2006). Listening comprehension: The learners' perspective. *System*, 34(2), 165–182. <https://doi.org/10.1016/j.system.2005.11.001>
- [22] Graham, S. (2007). Learner strategies and self-efficacy: Making the connection. *Language Learning Journal*, 35(1), 81–93.
- [23] Graham, S. (2011). Self-efficacy and academic listening. *Journal of English for Academic Purposes*, 10(2), 113–117. <https://doi.org/10.1016/j.jeap.2011.04.001>
- [24] Graham, S. (2017). Research into practice: Listening strategies in an instructed classroom setting. *Language Teaching*, 50(1), 107–119. <https://doi.org/10.1017/S0261444816000306>
- [25] Graham, S., & Macaro, E. (2008). Strategy instruction in listening for lower-intermediate learners of French. *Language Learning*, 58(4), 747–783. <https://doi.org/10.1111/j.1467-9922.2008.00478.x>
- [26] Graham, S., & Santos, D. (2013). Selective listening in L2 learners of French. *Language Awareness*, 22(1), 56–75. <https://doi.org/10.1080/09658416.2011.652634>
- [27] Graham, S., & Santos, D. (2015). *Strategies for second language listening: Current scenarios and improved pedagogy*. Palgrave Macmillan. <https://doi.org/10.1057/9781137410528>
- [28] Graham, S., Santos, D., & Vanderplank, R. (2011). Exploring the relationship between listening development and strategy use. *Language Teaching Research*, 15(4), 435–456. <https://doi.org/10.1177/1362168811412026>
- [29] Gu, P. Y., Hu, G. W., & Zhang, L. J. (2009). Listening strategies of Singaporean primary pupils. In R. E. Silver, C. C. M. Goh,

- & L. Alsagoff (Eds.), *Language learning in new English contexts: Studies of acquisition and development* (pp. 55–74). Continuum.
- [30] Hamouda, A. (2013). An investigation of listening comprehension problems encountered by Saudi students in the EL listening classroom. *International Journal of Academic Research in Progressive Education and Development*, 2(2), 113–155.
- [31] Harris, V. (2007). Exploring progression: reading and listening strategy instruction with near-beginner learners of French. *Language Learning Journal*, 35(2), 189–204. <https://doi.org/10.1080/09571730701599229>
- [32] Huang, J., Gu, X., Yao, Y., & Zheng, Y. (2017). The relationship between self-efficacy, perceived use of listening strategies, and listening proficiency: A study of EFL learners in China. *Asian EFL Journal*, 19(4), 103–131.
- [33] Huang, Y. H., & Lin, C. C. (2023). Metacognitive strategy instruction and mobile-based exercises for adolescent EFL listeners in Taiwan. *English Teaching & Learning*, 47(2), 241–262.
- [34] Irgin, P., & Erten, I. H. (2020). Exploring the role of strategy instruction: Young learners' listening performance and strategy use. *Eurasian Journal of Applied Linguistics*, 6(3), 415–441. <https://doi.org/10.32601/ejal.834676>
- [35] Jin, Y., & Yang, H. Z. (2018). Zou zhong guo te se de yu yan ce shi dao lu: Da xue ying yu si liu ji kao shi san shi nian de qi shi [Taking the road of language testing with China's characteristics: The enlightenment of CET-4 and CET-6 for 30 years]. *Wai yu jie*, 2, 29–39.
- [36] Kaivanpanah, S., Alavi, S. M., & AL-Shammari, H. (2020). Examining the effect of listening strategy instruction on EFL Iraqi learners' listening anxiety. *Arab World English Journal: Special Issue on the English Language in Iraqi Context, January*, 62–75. <https://doi.org/10.24093/awej/elt2.4>
- [37] Kassem, H. M. (2015). The relationship between listening strategies used by Egyptian EFL college sophomores and their listening comprehension and self-efficacy. *English Language Teaching*, 8(2), 153–169. <https://doi.org/10.5539/elt.v8n2p153>
- [38] Khosroshahi, H. H., & Merç, A. (2020). Listening self-efficacy beliefs, L2 listening proficiency, and listening strategy training. *ELT Forum: Journal of English Language Teaching*, 9(2), 1–14.
- [39] Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.
- [40] Li, Q., Zhang, L. M., & Goh, C. C. M. (2022). Metacognitive instruction in second language listening: Does language proficiency matter? *English as a Foreign Language International Journal*, 26(5), 27–55. <https://doi.org/10.56498/3922652022>
- [41] Li, Y. P. (2012). *Xin shi ji yan jiu sheng gong gong ying yu jiao cai* [English listening and speaking textbook for postgraduate students in the new century] (2nd ed.). Shanghai Foreign Language Education Press.
- [42] Liang, W. X. (2010). *Er yu ting li zhong de xue xi zhe yin su yan jiu* [Learners' factors in second language listening]. Shanghai: Shanghai Jiaotong University Press.
- [43] Lin, Y. (2019). Zhi jia shi jia xue mo shi zai ying yu ting li ce lue pei xun zhong de ying yong tan xi [On the application of scaffolding instruction to the strategy training in College English listening]. *Chang chun shi fan da xue xue bao*, 38(11), 181–185.
- [44] Little, D. (2022). Language learner autonomy: Rethinking language teaching. *Language Teaching*, 55(1), 64–73.
- [45] Liu, L., Liu, J., & Li, Y. (2009). Fei ying yu zhuang ye shuo shi yan jiu sheng ying yu ting li xue xi ce lue xun lian tan suo [A study of English listening strategy training for non-English-major postgraduate students]. *Medical Research and Education*, 26(1), 105–107.
- [46] Lotfi, G., Maftoon, P., & Birjandi, P. (2016). Learning to listen: does intervention make a difference? *The Language Learning Journal*, 44(1), 107–123. <https://doi.org/10.1080/09571736.2012.734320>
- [47] Lou, H. Y. (2004). Ting li ce lue jiao xue yu zheng chang ke tang jiao xue de zheng he yan jiu [A study of the integration of listening strategy instruction into classroom teaching tasks]. *Wai yu yan jiu*, 88(6), 43–49.
- [48] Lynch, T. (2009). *Teaching second language listening*. Oxford University Press.
- [49] Milliner, B., & Dimoski, B. (2019). Explicit listening strategy training for ELF learners. *The Journal of Asia TEFL*, 16(3), 833–859.
- [50] Milliner, B., & Dimoski, B. (2024). The effects of a metacognitive intervention on lower-proficiency EFL learners' listening comprehension and listening self-efficacy. *Language Teaching Research*, 28(2), 679–713.
- [51] Namaziandost, E., Neisi, L., Mahdavi-rad, F., & Nasri, M. (2019). The relationship between listening comprehension problems and strategy usage among advance EFL learners. *Cogent Psychology*, 6(1), 1–19. <https://doi.org/10.1080/23311908.2019.1691338>
- [52] Ngo, N. (2019). Understanding the impact of listening strategy instruction on listening strategy use from a socio-cultural perspective. *System*, 81, 63–77. <https://doi.org/10.1016/j.system.2019.01.002>
- [53] Nguyen, H. H. (2018). Fostering Positive Listening Habits among EFL Learners through the Application of Listening Strategy and Sub-skill Instructions. *Journal of Language Teaching and Research*, 9(2), 268–279. <https://doi.org/10.17507/jltr.0902.07>
- [54] O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge University Press.
- [55] Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Newbury House.
- [56] Pallant, J. (2016). *SPSS survival manual* (6th ed.). McGraw-Hill Education.
- [57] Piamsai, C. (2014). An investigation of the use of listening strategies and listening performance of proficient and nonproficient language learners. *PASAA: Journal of Language Teaching and Learning in Thailand*, 47, 147–180.
- [58] Pituch, K. A., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences: Analyses with SAS and IBM's SPSS* (6th ed.). Routledge.
- [59] Roussel, S., Gruson, B., & Galan, J. P. (2019). What types of training improve learners' performances in second language listening comprehension? *International Journal of Listening*, 33(1), 39–52. <https://doi.org/10.1080/10904018.2017.1331133>
- [60] Schunk, D. H. (2003). Self-efficacy for reading and writing: Influence of modeling, goal setting, and self-evaluation. *Reading and Writing Quarterly*, 19(2), 159–172.
- [61] Shannon, F. (2008). Cognitive and metacognitive listening strategies training for university non-English majors. *Hwa Kang Journal of English Language & Literature*, 14, 1–33.
- [62] Siegel, J. (2015). *Exploring listening strategy instruction through action research*. Palgrave Macmillan.
- [63] Simasangyaporn, N. (2016). *The effect of listening strategy instruction on Thai learners' self-efficacy, English listening*

- comprehension and reported use of listening strategies* [Unpublished doctoral dissertation]. University of Reading.
- [64] Sotoudeh, N. (2013). Effect of listening strategy training on Iranian EFL learners' listening comprehension and use of strategies. *International Journal of Linguistics*, 5(6), 171–193.
- [65] Su, Y. N. (2003). Lun ting li xue xi ce lue de ke jiao xing— Yi xiang ji yu zhong guo wai yu chu xue zhe de shi yan yan jiu [On teachability of listening strategies—an experimental research for Chinese EFL beginning learners of listening]. *Xian dai wai yu*, 26(1), 49–58.
- [66] Tabrizi, H. M., & Saeidi, M. (2015). The relationship among Iranian EFL learners' self-efficacy, autonomy and listening comprehension ability. *English Language Teaching*, 8(12), 158–169. <https://doi.org/10.5539/elt.v8n12p158>
- [67] Tosun, S. (2021). An exploration of the relationship between listening strategy use and listening comprehension of undergraduate EFL students. *International Journal of Research in English Education*, 6(2), 89–101.
- [68] Vandergrift, L. (2003). Orchestrating strategy use: toward a model of the skilled second language listener. *Language Learning*, 53(3), 463–496. <https://doi.org/10.1111/1467-9922.00232>
- [69] Vandergrift, L. (2004). Listening to learn or learning to listen? *Annual Review of Applied Linguistics*, 24, 3–25.
- [70] Vandergrift, L., & Baker, S. (2015). Learner variables in second language listening comprehension: An exploratory path analysis. *Language Learning*, 65(2), 390–416.
- [71] Vandergrift, L., & Goh, C. (2009). Teaching and testing listening comprehension. In M. H. Long & C. J. Doughty (Eds.), *The handbook of language teaching* (pp. 395–411). Malden, MA: Wiley-Blackwell.
- [72] Vandergrift, L., & Tafaghodtari, M. H. (2010). Teaching L2 learners how to listen does make a difference: An empirical study. *Language Learning*, 60(2), 470–497. <https://doi.org/10.1111/j.1467-9922.2009.00559.x>
- [73] Vanderplank, R. (2013). Listening and understanding. In P. Driscoll, E. Macaro, & A. Swarbrick (Eds.), *Debates in modern languages education* (pp. 53–65). Abingdon, UK: Routledge.
- [74] Yabukoshi, T. (2021). Self-regulation and self-efficacy for the improvement of listening proficiency outside the classroom. *The Language Learning Journal*, 49(1), 27–40. <https://doi.org/10.1080/09571736.2018.1472626>
- [75] Yang, X. L. (2018). Da xue ying yu ting li ce lue xun lian mo shi ji qi xiao guo yan jiu [A study on the training mode and effect of College English listening strategies]. *Ji shou da xue xue bao* (Academic special edition), 39, 214–219.
- [76] Yu, G., & Jin, Y. (Eds.). (2015). *Assessing Chinese learners of English: language constructs, consequences and conundrums*. Palgrave.
- [77] Zhang, L., Yu, X., & Goh, C. C. M. (2022). Improving performance and metacognitive awareness in listening through metacognitive instruction for Chinese language learners. *RELC Journal*, October, 1–8. <https://doi.org/10.1177/00336882221129645>
- [78] Zhu, X. H. (2010). Da xue ying yu ting li ce lue xun lian mo shi yu xiao guo fen xi [The model and effect analyses of College English listening strategy instruction]. *Wai yu yan jiu*, 2, 53–58.



**Feng-Ming Zhou** is a senior lecturer at the School of Foreign Languages and Cultures, Nanjing Normal University, China. She pursued her B.A. (English) and M.A. (English) in China. She received her doctoral degree (PhD in Education) from Taylor's University, Malaysia in 2025. Her research areas mainly encompass EFL teaching and learning, applied linguistics, and translation.

**Swee Heng Chan** has more than 40 years of ESL teaching experience. She was attached to the Faculty of Modern Languages and Communication as Professor in Applied Linguistics at Universiti Putra Malaysia and Taylor's University, Malaysia. She currently works as a Language Consultant at Universiti Putra Malaysia Holdings.

**Moses Samuel** is Senior Research Fellow at the School of Education, Taylor's University and Honorary Professor at the Faculty of Education, University of Malaya in Kuala Lumpur, Malaysia. His research focus is on Applied Linguistics and TESOL.