Enhancing English Listening Skills through Metacognitive Strategy: A Study on Student Achievement

Zuraidah Nasution
Ilmu Hukum, Fakultas Hukum, Universitas Alwashliyah, Medan
Email: idanasution@gmail.com

Syafrina Prihatini
Pendidikan Bahasa Inggris, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Alwashliyah, Medan
Email: syafrina.ari@gmail.com

ABSTRACT

This study investigates the significant effect of metacognitive strategy instruction on students' achievement in listening comprehension among eighth-grade students at SMP Muhammadiyah 7 Medan during the 2022/2023 academic year. The population consisted of 60 students, divided into an experimental group taught using metacognitive strategies and a control group taught by conventional methods. Employing a quantitative descriptive design, data were collected through multiple-choice and essay listening tests and analyzed using an independent samples t-test. The results demonstrated a statistically significant improvement in the experimental group's listening comprehension compared to the control group ($t_0 = 15.52 > t_t = 2.00$, $p < 0.05$, $df = 94$). This finding aligns with contemporary research highlighting that metacognitive strategies—such as planning, monitoring, and evaluating listening processes—enhance learners' ability to manage comprehension challenges and improve performance (Aktar, 2020). The study confirms that teaching metacognitive strategies fosters greater learner autonomy, motivation, and effective listening skills, particularly in second language contexts where learners face difficulties such as limited vocabulary and lack of exposure to native speakers. Implications suggest that integrating metacognitive strategy instruction into listening curricula can significantly boost students' listening achievement and overall language proficiency.

Keywords: metacognitive, strategies, instruction, listening comprehension, second language

ABSTRAK

Penelitian ini bertujuan untuk mengkaji pengaruh signifikan dari pembelajaran strategi metakognitif terhadap pencapaian siswa dalam pemahaman mendengarkan pada siswa kelas VIII di SMP Muhammadiyah 7 Medan selama tahun ajaran 2015-2016. Populasi penelitian terdiri dari 60 siswa yang dibagi menjadi dua kelompok, yakni kelompok eksperimen yang menerima pembelajaran dengan strategi metakognitif dan kelompok kontrol yang diajar menggunakan metode konvensional. Dengan menggunakan desain kuantitatif deskriptif, data dikumpulkan melalui tes mendengarkan berupa pilihan ganda dan esai, kemudian dianalisis menggunakan uji t independen. Hasil penelitian menunjukkan bahwa kemampuan pemahaman mendengarkan pada kelompok eksperimen meningkat secara signifikan dibandingkan dengan kelompok kontrol ($t_0 = 15,52 > t_t = 2,00$, $p < 0,05$, $df = 94$). Temuan ini sejalan dengan penelitian-penelitian terkini yang menegaskan bahwa strategi metakognitif—seperti perencanaan, pemantauan, dan evaluasi proses mendengarkan—membantu siswa dalam mengatasi kesulitan pemahaman sekaligus meningkatkan kinerja mereka (Aktar, 2020). Studi ini menegaskan bahwa pengajaran strategi metakognitif tidak hanya meningkatkan kemandirian dan motivasi belajar siswa, tetapi juga memperkuat keterampilan mendengarkan secara efektif, terutama dalam konteks pembelajaran bahasa kedua yang sering kali menghadirkan tantangan seperti keterbatasan kosakata dan minimnya paparan terhadap penutur asli. Implikasi dari penelitian ini menunjukkan bahwa integrasi strategi metakognitif dalam kurikulum pembelajaran mendengarkan dapat memberikan kontribusi signifikan dalam meningkatkan prestasi mendengarkan serta kemampuan bahasa secara menyeluruh.

Kata kunci: metakognitif, strategi, instruksi, pemahaman mendengarkan, bahasa kedua

A. Introduction

Listening comprehension is a fundamental yet often difficult aspect of acquiring a new language. Traditional teaching methods frequently neglect learners' self-awareness of their cognitive activities during listening. Metacognitive strategies—such as planning, monitoring, and evaluating one's understanding—enable learners to manage and enhance their listening skills effectively. This study aims to assess the effect of metacognitive strategy instruction on students' success in English listening, offering insights for teaching practices that encourage learner independence and efficiency. Effective communication depends heavily on good listening skills; without them, understanding others becomes difficult. Vandergrift and Goh in (Robillos & Bustos, 2022) propose a teaching framework involving pre-listening activities, multiple listening attempts, and reflective exercises to develop learners' self-knowledge, task understanding, and strategic skills. Research shows that proficient listeners actively use selective attention and comprehension monitoring, blending top-down and bottom-up approaches to improve understanding. Additionally, heightened metacognitive awareness correlates with better listening proficiency, as learners are more adept at addressing comprehension challenges and adjusting their strategies. The Metacognitive Awareness Listening Questionnaire (MALQ), created by Vandergrift et al , is a widely accepted tool for measuring learners' metacognitive listening awareness across various contexts.(Vandergrift et al., 2006)

To overcome these challenges, teachers must adopt creative and varied teaching strategies that foster a motivating classroom atmosphere. According to Underwood (1987), teachers' skills significantly influence students' attitudes and motivation toward learning. A well-planned strategy can improve students' engagement and achievement in listening comprehension. Learning strategies play a vital role in this process. Paine (2011) defines a learning strategy as the comprehensive presentation of teaching materials and associated activities before, during, and after learning. (Paine, 2011) Similarly, Joyce and Weil highlight that learning strategies encompass curriculum planning, instructional design, and the use of various learning resources. (Joyce & Calhoun, 2015)

One particularly effective strategy is the Metacognitive Strategy. Lai (2011) explains that metacognition enables students to apply previously learned strategies to new contexts (Lai, 2011). According to Flavell, the term "metacognition" to mean "thinking about thinking," which involves managing cognitive and affective processes. Metacognitive strategies help learners regulate their motivation and persistence, especially when facing challenging tasks (Flavell, 2000). Given these considerations, this study aims to investigate the effectiveness of the Metacognitive Strategy in teaching listening comprehension to eighth-grade students at SMP Muhammadiyah 7 Medan during the 2022/2023 academic year.

The study identifies several problems affecting students' listening comprehension: namely limited vocabulary, insufficient listening knowledge, and rare exposure to native speakers or authentic recordings. This research focuses on listening comprehension, specifically the use of the Metacognitive Strategy to improve students' achievement in understanding recount texts. The study is conducted with eighth-grade students at SMP Muhammadiyah 7 Medan in the 2022/2023 academic year. Based on the problems identified, the research tries to answer the question of "Is there a significant effect of the Metacognitive Strategy on students' achievement in listening comprehension?" The findings of this study are expected to benefit theoretically and practically. Providing useful insights into teaching listening comprehension through metacognitive strategies, improving students' listening achievement, especially in recount texts and equipping them with innovative strategies to enhance student interest and performance in listening.

Understanding the distinctions among approach, strategy, method, and technique is crucial for effective language teaching. Nunan (1991) describes strategies as mental and communicative procedures

used by learners to acquire and use language. Effective strategies help both teachers and students achieve learning objectives efficiently (Nunan, 1991). Harmer (2007) explains that a method is the practical application of an approach, involving specific classroom activities, roles, and materials. Techniques are the specific actions or tricks used in the classroom to achieve immediate objectives, consistent with the chosen method and approach. (Harmer, 2007)

Metacognition refers to "thinking about thinking"—the awareness and regulation of one's own cognitive processes (Flavell, 2000). It encompasses knowledge about one's cognitive abilities, the active monitoring of learning activities, and the regulation of strategies to achieve learning goals (Louca, 2014). Pintrich identifies three main aspects of metacognition: Metacognitive Knowledge, Metacognitive Monitoring, and Self-Regulation and Control. Metacognitive strategies are particularly important in language learning, as they help learners plan, monitor, and evaluate their progress, leading to more effective and independent learning (Pintrich, 2002).

Pintrich further synthesizes these into four phases: forethought, monitoring, control, and reflection. These strategies are especially beneficial in listening comprehension, where learners must process spoken language in real time. There are also advantages and disadvantages of metacognitive strategies. Wenden (1998) lists several advantages of metacognitive strategies: namely more strategic and independent learners, faster and higher quality cognitive engagement, greater confidence and willingness to seek help, accurate self-assessment and adaptability, and perception as lifelong learners. However, disadvantages may include poor self-esteem and problem-solving skills if not properly developed, weak reading comprehension and communication abilities, and difficulty achieving success in academic and social contexts. (Wenden, 1998)

Empirical evidence supports the positive influence of metacognitive strategy training on listening skills. For example, a study by Echalico-Bermillo and Aradill (J.

Echalico-Bermillo and Fatima Joy Rana Aradilla, 2022) with Grade 10 students revealed that those exposed to Metacognitive Process-Based Listening Instruction (MPBLI) showed greater improvement in listening comprehension and metacognitive awareness than peers who received standard instruction. Lesnov et. al (Lesnov, R., Wolhein, S. and Bogorevich, 2020) found that while metacognitive strategy teaching may not immediately boost listening test scores, it significantly enhances learners' metacognitive awareness, which is vital for sustained listening improvement. A meta-analysis covering 31 studies from 2010 to 2022 confirmed that metacognitive strategy instruction substantially benefits English listening outcomes, with the educational setting influencing the magnitude of effects. Research by Hartati et al. (2025) also emphasizes the combined impact of metacognitive strategies and self-confidence on listening success, suggesting that integrating strategy instruction with confidence-building yields optimal results. (Hartati et al., 2025)

Another previous research from Whitehead (2020) found experimental group showed significant post-test gain. It showed that the experimental group scored significantly higher than the control group on the post-test. Additionally, the study addresses the educational implications of these findings (Whitehead, 2020). Taherkhani's research (2022) showed that MLSI significantly improved listening comprehension for learners with an internal locus of control, while external locus of control did not significantly affect listening ability. The study also discussed pedagogical implications for EFL teaching contexts, highlighting the benefits of metacognitive strategy training in enhancing listening skills (Taherkhani et al., 2022). Research by Pei. et al (2023) deployed online listening practice under MPC resulted a more effective way to improve L2 learners' listening comprehension than traditional listening practice. However, the task-setting of MPC and the task-dependence of self-efficacy may constrain the development of some factors of metacognitive awareness and self-efficacy (Pei et al., 2023).

B. Research Method

Location

This research was conducted at SMP Muhammadiyah 7 Medan, located at Jln. Pelita II No. 3-5, Medan, during the 2022/2023 academic year. The school was selected based on the researcher's prior teaching experience, which indicated that students had difficulties in listening comprehension and showed low interest in learning English. The existing teaching method primarily involved providing texts and playing recordings without adequate explanation, resulting in student confusion and disengagement.

Population and Sample
1. Population

The population consisted of all eighth-grade students at SMP Muhammadiyah 7 Medan during the 2020/2021 academic year. There were 92 students distributed across three classes as shown below:

The Population of the Research

Class	Number of Students
VIII-1	30
VIII-2	32
VIII-3	30
Total	92

2. Sample

Two classes were selected as the sample using cluster random sampling via a lottery technique. The slips of paper representing each class were drawn randomly, resulting in the selection of classes VIII-1 and VIII-3. Class VIII-1 (30 students) served as the experimental group, while class VIII-3 (30 students) served as the control group, totaling 60 students.

The Sample of the Research

Class	Group	Number of Students
VIII-1	Experimental Group	30
VIII-3	Control Group	30
	Total	60

This study employed an experimental research design to investigate the effect of metacognitive strategy on students' listening comprehension. The design aimed to establish a clear cause-and-effect relationship between the teaching strategy and students' listening performance.

Research Design for Experimental Groupand Control Group

Group	Pre-test	Treatment	Post-test
Experimental	Yes	Metacognitive strategy	Yes
Control	Yes	Conventional teaching strategy	Yes

- Experimental group: Students were taught using metacognitive strategies.
- Control group: Students were taught using conventional teaching methods.

3. Procedure

Pre-test
Both groups were given the same pre-test before treatment to assess their initial listening comprehension skills.
- Treatment

Both groups received instruction on the same listening material but with different teaching methods:

Step	Experimental Group (Metacognitive Strategy)	Control Group (Conventional Strategy)
1	Teacher greets students and opens the class	Teacher greets students and opens the class
2	Teacher motivates students by	Teacher motivates

	explaining the importance of listening comprehension	students similarly
3	Teacher conducts brainstorming activity ("Who am I" game)	Teacher conducts brainstorming activity ("Who am I" game)
4	Teacher distributes the script	Teacher distributes the script
5	Teacher briefly explains the material and task role	Teacher plays the recording 3-4 times
6	Students prepare their own strategies and mark the script when encountering difficulties	Students submit the script
7	Students read and comprehend the script	Teacher distributes the script to different students
8	Teacher plays the recording twice; students listen and complete the text	Teacher and students correct the work together by listening to the recording again
9	Teacher asks students about their difficulties	Students submit the corrected work
10	Students translate what they hear mentally	Teacher closes the class
11	Students submit their scripts	
12	Teacher and students discuss and evaluate the learning process	

13	Teacher closes the learning session	

Research Instrument

The data collection instrument was a written multiple-choice test consisting of 20 items focused on listening comprehension. The scoring formula used was:

$$S = \frac{R}{N} x\ 100$$

Where:
- S = score
- R = number of correct answers
- N = total number of test items (20)

Data Collection Technique

The data were collected through the following steps:
1. Administering the pre-test to both groups.
2. Providing treatment according to group assignment (metacognitive strategy for experimental group, conventional strategy for control group).
3. Administering the post-test to both groups using the same test.
4. Collecting and recording the test scores.

Data Analysis Procedure

After collecting the test data, the analysis was conducted using the following detailed steps:

1. Scoring the Test Results

Each student's answers were scored using the formula:

$$S = NR \times 100$$

Where:
- **S** = the student's score (percentage)
- **R** = the number of correct answers
- **N** = the total number of test items (in this case, 20)

This formula converts the raw number of correct answers into a percentage score for easier comparison.

2. Organizing the Scores

The scores were then organized into two separate tables:

- One table for the **experimental group** scores
- One table for the **control group** scores

This separation allows for clear comparison between the two groups.

3. Testing for Normality and Homogeneity

Before conducting the t-test, two assumptions needed to be verified:

- **Normality:** To check whether the distribution of scores in each group follows a normal distribution, the **Liliefors test** was used.

- **Homogeneity of Variance:** To ensure that the variances between the two groups are equal, the Liliefors test also helped assess homogeneity.

If both assumptions are met, the t-test can be validly applied.

4. Calculating the Correlation Coefficient (r)

According to Sugiyono (Soegiyono, 2011), the correlation coefficient between two variables X and Y is calculated by:

$$R_{xy} = \frac{n \sum X_i Y_i - (\sum X_i)(\sum Y_i)}{\sqrt{\left\{n \sum X_{\frac{1}{2}} - (X_i)2\right\}\left\{n \sum X_{\frac{1}{2}} - (Y)2\right\}}}$$

Where:

- n = number of paired observations
- X_i, Y_i = individual scores in each group
- $\sum$ = summation symbol

This coefficient measures the strength and direction of the linear relationship between the two sets of scores.

5. Conducting the t-test

To determine whether there is a significant difference between the experimental and control groups, the t-test formula used (Soegiyono, 2011) is:

$$t = \frac{\overline{X_{\iota} X_2}}{\frac{S_2^1}{N_1} + \frac{S_2^2}{N_2} + 2R\left(\frac{S_i}{\sqrt{N_1}}\right) + \left(\frac{S_2}{\sqrt{N_2}}\right)}$$

Where:

- $\overline{X}_1 X1$ = mean score of the experimental group
- $\overline{X}_2 X2$ = mean score of the control group
- $S1$ = standard deviation of the experimental group
- $S2$ = standard deviation of the control group
- $N1$ = sample size of the experimental group
- $N2$ = sample size of the control group
- R = correlation coefficient between the two groups' scores

This formula accounts for the difference in means, variability within groups, sample sizes, and the correlation between groups.

6. Hypothesis Test

The hypotheses for this study are:

- **Null Hypothesis (H₀):** There is no significant effect of using the metacognitive strategy on students' listening comprehension achievement.

- **Alternative Hypothesis (Hₐ):** There is a significant effect of using the metacognitive strategy on students' listening comprehension achievement.

Decision rule:

- If the calculated t-value (**t-observed**) is **greater** than the critical t-value from the t-distribution table (**t-table**), then **reject H₀** and accept Hₐ. This means the treatment had a significant effect.

- If the calculated t-value (**t-observed**) is **less** than or equal to the critical t-value (**t-table**), then **fail to reject H₀** and reject Hₐ. This means the treatment did not have a significant effect.

Formally:

- If $t_{observed} > t_{table}$, **reject H₀** (accept Hₐ)
- If $t_{observed} \leq t_{table}$, **accept H₀** (reject Hₐ)

C. Result and Discussion

Data Collection

The data for this research was collected by giving listening tests to students. The students were divided into two groups: an experimental group and a control group. Each group took a pre-test before treatment and a post-test after treatment.

Experimental Group Results

- Number of students: 30
- Pre-test scores: Lowest = 50, Highest = 75, Mean = 60.16
- Post-test scores: Lowest = 65, Highest = 95, Mean = 82.16

Statistic	Pre-test	Post-test
Highest Score	75	95
Lowest Score	50	65
Mean	60.16	82.16

Control Group Results

- Number of students: 30
- Pre-test scores: Lowest = 50, Highest = 75, Mean = 56.5
- Post-test scores: Lowest = 60, Highest = 85, Mean = 70.83

Statistic	Pre-test	Post-test
Highest Score	75	85
Lowest Score	50	60
Mean	56.5	70.83

Summary

- Both groups started with similar pre-test scores.
- After treatment, the experimental group (using metacognitive strategies) showed a much higher improvement in post-test scores compared to the control group.

In short, listening tests were given to both groups before and after the teaching intervention. The experimental group improved more than the control group, suggesting that metacognitive strategies had a positive effect on listening comprehension.

Data Analysis
1. Normality Test

The purpose is to check if the students' scores are normally distributed. The procedures are:

- The Liliefors test was used.
- Students' post-test scores were listed from lowest to highest.
- Each score was converted into a Z-score using the formula:

$$Z1 = \frac{x - \bar{x}}{s}$$

Where:

- X = individual score
- $\bar{x}$ = mean score
- S = standard deviation

The cumulative proportion for each score was calculated and compared to the standard normal table. The largest difference (Lobserved) was compared to the critical value (Ltable).

Results:

- For the experimental group: Lobserved = 0.058, Ltable = 0.161
- For the control group: Lobserved = 0.024, Ltable = 0.161
- **Conclusion:** Both groups' scores are normally distributed because Lobserved < Ltable.

2. Homogeneity Test

The purpose is to check if both groups have similar variances. It was done by:

- The variance for each group was calculated.
- The F-test was used:

$$F = \frac{THE\ HIGHEST\ VARIANCE}{THE\ LOWEST\ VARIANCE}$$

Fobserved was compared with Ftable.

Results:

- Experimental group variance = 97.73
- Control group variance = 51.87
- Fobserved = 1.88, Ftable = 2.215
- **Conclusion:** The data is homogeneous (Fobserved < Ftable).

3. Hypothesis Test

The Purpose is **to** see if there is a significant difference between the two groups after treatment.
How it was done**:**
The t-test formula from Sugiyono was used:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2} - 2R\left(\frac{S_1}{\sqrt{N_1}}\right)\left(\frac{S_2}{\sqrt{N_2}}\right)}}$$

Where:
$\bar{X}_1$= mean of experimental group (82.16)
$\bar{X}_2$= mean of control group (70.83)
S_1= standard deviation of experimental group (9.88)
S_2 = standard deviation of control group (7.20)
$N_1 = N_2$= 30
R = correlation coefficient (0.94)
The calculated t-value was 15.52.
The critical t-value from the table (df = 58, α = 0.05) was 2.00.

Results:

- t-observed = 15.52 > t-table = 2.00
- Conclusion: There is a significant difference between the groups. The experimental group performed much better.

4. Effect Size

The purpose is to show how strong the effect was. How it was done:
- The correlation coefficient (R) was found to be 0.94.

- The effect size was calculated as 94%

It proved:
Significant   = r x 100%
               = 0.94 x 100%
               = 94%

The research findings that can be concluded are:
- The t-test showed a significant difference between the experimental and control groups.
- The use of metacognitive strategies improved students' listening comprehension by 94%.
- The null hypothesis was rejected, and the alternative hypothesis was accepted.

In summary, the data analysis showed that the students taught with metacognitive strategies had much better listening comprehension scores than those taught with conventional methods. The effect was statistically significant and very strong.

D. Conclusion and Suggestion

The results of this study indicate that the use of metacognitive strategies has a significant positive effect on students' achievement in listening comprehension. The experimental group, which received instruction using metacognitive strategies, showed a substantial improvement in post-test scores (mean = 82.16) compared to their pre-test scores (mean = 60.16). In contrast, the control group, which was taught using conventional methods, also improved but to a lesser extent, with post-test scores averaging 70.83 compared to a pre-test mean of 56.5. These findings suggest that metacognitive strategies are more effective in enhancing listening comprehension than traditional teaching methods.

Statistical analysis further supports these results. Both the normality and homogeneity tests confirmed that the data met the necessary assumptions for hypothesis testing. The t-test revealed a t-observed value of 15.52, which is substantially higher than the critical t-table value of 2.00 at the 0.05 significance level. Additionally, the

correlation coefficient (r) was calculated to be 0.94, indicating a very strong relationship and a significant effect size of 94%. These statistical outcomes confirm that the observed improvements in the experimental group were not due to chance.

In conclusion, the findings clearly demonstrate that implementing metacognitive strategies in listening instruction can significantly enhance students' listening comprehension skills. Based on these results, it is recommended that educators incorporate metacognitive approaches into their teaching practices to improve students' outcomes in listening comprehension. Future research may explore the application of these strategies in other language skills or educational contexts to further validate their effectiveness.

Further research can be conducted to understand the effectiveness of metacognition in enhancing students' skills and identifying the most effective strategies. It may consider using different learning methods or combining several methods to see their impact on student learning outcomes. In addition, research with larger and more diverse samples is also recommended to increase the generalizability of the results.

E. Reference

Aktar, T. (2020). Exploring the Teachers' Perspective on Morality in an English as a Foreign Language Pedagogy. *Journal of ELT Research: The Academic Journal of Studies in English Language Teaching and Learning*, *5*(1), 80–93. https://doi.org/10.22236/JER

Flavell, J. H. (2000). Development of children's knowledge about the mental world. *International Journal of Behavioral Development*, *24*(1), 15–23. https://doi.org/10.1080/016502500383421

Harmer, J. (2007). *The Practice of English Language Teaching* (Fourth Edi). Pearson Education Limited.

Hartati, S., Aini, S. N., & Sukmaningrum, R. (2025). *The Impact of Metacognitive Strategies and Self-Efficacy on Listening Comprehension Among Indonesian High School Students*. 5(2).

J. Echalico-Bermillo and Fatima Joy Rana Aradilla. (2022). Developing Students' Listening Comprehension and Metacognitive Awareness through Metacognitive Process-Based Listening Instruction. *Journal of English Language Teaching and Applied Linguistics*, *4*(1), 84–93. https://doi.org/10.32996/jeltal.2022.4.1.8

Joyce, B., & Calhoun, E. (2015). Models of Teaching. In *Models of Teaching* (8th ed.). Pearson. https://doi.org/10.4324/9781003455370

Lai, E. R. (2011). Metacognition: A Literature Review Research Report. *Pearson*, *April*. http://www.pearsonassessments.com/research.

Lesnov, R., Wolhein, S. and Bogorevich, V. (2020). Pronunciation in Second Language Learning and Teaching. *Second Language Learning*, *May*, 206. https://apling.engl.iastate.edu/alt-content/uploads/2015/05/PSLLT_5th_Proceedings_2013.pdf

Louca, E. L. P. (2014). Metacognition. *Encyclopedia of Educational Theory and Philosophy*, *January*, 523–526. https://doi.org/10.4135/9781483346229

Nunan, D. (1991). *Language teaching methodology: a textbook for teachers* (p. 139).

Paine, N. (2011). Learning Strategies. In N. Paine (Ed.), *Learning Strategies*. The Masie Center.

Pei, T., Suwanthep, J., & Lu, H. (2023). The effect of self-directed online metacognitive listening practice on Chinese EFL learners' listening ability, metacognition, and self-efficacy. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1285059

Pintrich, P. R. (2002). *Motivation in Education* (K. M. Davis (ed.); 2nd ed.). Merril Prentice Hall.

Robillos, R. J., & Bustos, I. G. (2022). Learners' Listening Skill and Metacognitive Awareness through Metacognitive Strategy Instruction with

Pedagogical Cycle. *International Journal of Instruction*, *15*(3), 393–412. https://doi.org/10.29333/iji.2022.15322a

Soegiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif dan R&D.*

Taherkhani, B., Aliasin, S. H., Khosravi, R., & Izadpanah, S. (2022). The Interface Between Metacognitive Strategy Training and Locus of Control in Developing EFL Learners' Listening Comprehension Skill. *Frontiers in Education*, *7*(July). https://doi.org/10.3389/feduc.2022.847564

Vandergrift, L., Goh, C. C. M., Mareschal, C. J., & Tafaghodtari, M. H. (2006). The metacognitive awareness listening questionnaire: Development and validation. *Language Learning*, *56*(3), 431–462. https://doi.org/10.1111/j.1467-9922.2006.00373.x

Wenden, A. (1998). Metacognitive Knowledge and Language Learning. *Applied Linguistics*, *19*(4), 515–537. http://applij.oxfordjournals.org/

Whitehead, E. (2020). Application of Meta-Cognitive Strategy Instruction in Listening Comprehension to the Level III Student Teachers. *The Excellence in Education Journal*, *9*(1), 104–119. https://files.eric.ed.gov/fulltext/EJ1246724.pdf