



Effects of Explicit Metacognitive Strategy Training on Listening Comprehension and Metacognitive Awareness of Secondary School Students

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Abstract

This study aimed to examine the Effects of explicit metacognitive listening strategy training on the listening comprehension skills and metacognitive awareness of secondary school students. Since the researchers used intact groups (two sections from a school) for the purpose of this study, the non-equivalent quasi experimental design was applied. This enabled us to compare the possible effects of the metacognitive strategies on the listening comprehension and awareness of students. A mixed approach which combined quantitative and qualitative data was used. The main tools of the study were tests and metacognitive awareness listening questionnaires (MALQ). Intervention was carried out for the control and treatment group participant students in teaching listening skills. Moreover, tests and metacognitive awareness listening questionnaires were administered to the participant students both before and after the intervention. The data gathered through the test and metacognitive awareness listen questionnaire were analyzed using SPSS application. The paired and independent sample t tests were computed to see the mean differences in the two groups. Open ended items in the questionnaire were analyzed using qualitative approach. The finding of the paired and independent sample t-test revealed that there was statistically significant difference between the treatment and control groups. The treatment group participants showed better improvements in their listening comprehension skills compared to the control group participant students. The results from the metacognitive awareness listening questionnaires indicated that the participant students gained some kind of experiences on their awareness of the listening metacognitive strategies. In general, the findings of this study provides the potential benefits of the listening metacognitive strategy training for improving L2 listening comprehension skills of Ethiopian secondary school students.

Keywords

Listening Comprehension, Metacognitive Strategy, Metacognitive Awareness, Pedagogical Sequence

1. Introduction

As English is the language of international communication in different fields, it is considered as a global language (Crystal, 1997). Ministry of Education in Ethiopia (MOE) describes the benefits of the English language in the education system. The Ministry emphasizes that the English language proficiency of students can be enhanced if it is used as a subject and a medium of education at different levels of the school systems in the country (MOE, 2009). Therefore, developing the English language skills will have a greater contribution for EFL learners.

Listening, as one of the basic English language skills, needs to be given due attention by EFL teachers and learners. The learners' needs are not restricted only to their speaking, but also in the oral interaction of other speakers of the target language. That is, communication is two-way and unless the non-native speaker has a listening competence, it impedes his/her conversation to sustain (Field, 2008).

Listening is a crucial skill that allows language learners to process and engage with language input, supporting the development of other language abilities. However, compared to writing, reading, or even speaking, listening receives the least structured focus in teaching and learning materials. While students are often guided on composing written texts

or delivering oral presentations, they are rarely instructed on effective listening strategies or how to navigate spoken content (Vandergrift & Goh, 2012). Secondary school students in Ethiopia usually face great difficulties in comprehending the spoken English so as to use the language. In addition to this, the practice of teaching listening faces some challenges in the Ethiopian secondary schools. Birhan (2020) pointed out that the teaching of listening skills encounters several challenges, including teachers emphasis to grammar rather than listening, emphasizing explanation over creating opportunities for students to practice listening, relying on a teacher-centred approach, hesitating to encourage students to use English both inside and outside the classroom, and being unwilling to provide sufficient opportunities for students to develop their listening skills.

However, language learners and teachers can take different steps for the improvement of the teaching and learning of the listening skills. These steps are called learning strategies that help them for active and self-directed involvement. Appropriate learning strategies help the learners to develop better proficiency and increased self- confidence (Oxford, 1990).

A strategy-based approach to teaching listening emphasizes learner independence. Independent learning is a step toward becoming an autonomous learner—one who takes initiative in planning and executing their own learning process. In many approaches, listening has been overlooked. However, the communicative approach and the learner strategy approach place greater emphasis on developing listening skills, helping learners achieve the mastery (Flowerdew & Miller, 2005).

Listening metacognitive strategies play a significant role in the development of the listening performances of learners and metacognitive awareness helps learners to be self-knowing, self-directed and self-managed in learning listening skills in a second language (Vandergrift & Goh, 2012).

Although we could not get local studies that focused on the role of meta-cognitive listening strategies on the listening comprehension of students, these strategies can have a number of positive impacts on the improvement of the listening comprehension skills. Zheng (2018) reports that the development of listening skills greatly depends on the appropriate use of the metacognitive strategies. Its use not only contributes to the learners but also to the language teacher. In the present study, we intend to see the area that was not given much focus by the previous researchers, the listening metacognitive strategy, in the context of Ethiopia. Chibsa (2019) studied the students' metacognitive listening strategy awareness of Ambo university second year English major students. Although he tried to assess the students' metacognitive listening strategy awareness, he did not see the effects these strategies have on the students' listening comprehension skills. The present study would, therefore, try to examine the Effects of Meta-cognitive strategies on the listening comprehension skill and awareness of Ethiopian grade eleven EFL students' in Dessie town. This study answers the following research questions:

1. Is there statistically significant difference between the pre and post-test result of the treatment and control group students?
2. Is there any significant difference between the treatment group students' metacognitive awareness before and after the training of the metacognitive listening strategies?

2. Review of Literature

2.1 Strategy Instruction

Cohen, A. (2014) explains that explicitly teaching students how to use language learning and language use strategies referred to as strategy instruction. It plays a crucial role in supporting learners overall development of a second language (L2). By providing and making these strategies visible and accessible, language teachers can empower students to take an active role in their own learning process. The strategies not only enable learners to have steady progress toward their individual language learning goals, such as improving listening skills, but also align their efforts with the broader objectives the overall language learning. Moreover, strategy instruction encourages learners to become more autonomous and self-regulated, enabling them to identify, adapt, and apply techniques that work best for their unique learning styles and needs. Ultimately, this fosters greater motivation, confidence, and long-term success in language learning. Haukås, Bjørke, & Dypedahl, (2018 P, 18) describe that most metacognitive instructional models share certain principles, including activating students' prior knowledge, encouraging reflection on their existing understanding and learning goals, providing teacher-led explanations and demonstrations of learning strategies, and involving learners in setting goals as well as monitoring and evaluating their own learning progress..

2.2 Metacognition and Metacognitive Strategies

Goh and Vandergrift (2022) define metacognition as the ability to know and reflect our own thinking processes. It includes examining how we handle information for different purposes and adjust our methods accordingly. In essence, it allows us to step back from our own thoughts to assess and evaluate them. Metacognitive strategies can enable students to be responsible for their own learning. Learners who approach their education with a metacognitive level develop a sense of agency. Over time, they take greater control of their learning by adopting effective strategies to solve challenges and deepening their understanding of the subjects they study (Goh and Vandergrift, 2022).

Metacognitive instruction in L2 listening involves teaching methods that enhance learners' awareness of the listening process. It helps to develop a deeper understanding of listening demands, strategies, and effective practices. This

instruction equips learners to become more skilled in using the following processes: (1) planning for the activity; (2) monitoring comprehension; (3) solving comprehension problems and evaluating the approach Vandergrift and Goh (2012). The planning phase encourages listeners to be proactive in identifying what to focus on and to set the right conditions for effective listening. This preparation ensures that they pay attention to meaning and approach the activity thoughtfully, rather than diving in unprepared. While listening, listeners actively monitor their comprehension by comparing what they hear to their predictions, checking for consistency with prior knowledge, and ensuring the interpretation aligns with the context. They adjust their understanding as needed to maintain coherence and evaluate their overall comprehension.

As listeners monitor their comprehension and confront difficulties, they must adjust their approach to the text or activate specific strategies. They adjust their approach by activating more appropriate strategies as required. Listeners need to evaluate the effectiveness of the approach adopted and/ or decisions made during the listening process after completion of the activity. They reflect on difficulties encountered, what went wrong, and why.

To boost learners' development of metacognitive strategies, targeted training approaches can be employed. A Metacognitive pedagogical sequence frame work introduced by Vandergrift (2004) was used in this study to support the teaching of metacognitive strategies in the context of listening skill. In this frame work, learners are guided to apply metacognitive strategies directly during listening activities, helping them actively manage and improve their comprehension. The framework consists of structured stages: pre-listening, first listening, second listening, third listening, and reflection (Vandergrift & Goh, 2012). These stages are designed to scaffold strategy use throughout the listening process, promoting greater awareness and control over understanding.

Vandergrift & Goh, (2012, p 115) illustrates the stages of instruction and underlying metacognitive processes for listening activities as follows:

Pedagogical Stages	Metacognitive Processes
1. Pre-listening—Planning/predicting stage After learners have been informed of the topic and text type, they predict the types of information and possible words they may hear.	1. Planning
2. First listen—First verification stage a. Learners verify their initial hypotheses, correct as required, and note additional evaluation information understood. b. Learners compare what they have understood/ written with a partner, modify as required, establish what still needs resolution, and decide on the important details that still require special attention.	2a. Monitoring and evaluation 2b. Monitoring, evaluation, and planning
3. Second listen—Second verification stage a. Learners verify points of earlier disagreement, make corrections, and write down additional evaluation, and details understood. b. Class discussion in which all class members contribute to the reconstruction of the evaluation, text's main points and most pertinent details, interspersed with reflections on how learners arrived at the meaning of certain words or parts of the text.	3a. Monitoring, evaluation, and problem-solving 3b. Monitoring, and problem-solving
4. Third listen—Final verification stage Learners listen specifically for the information revealed in the class discussion which they were not able to make out earlier.	4. Monitoring and problem-solving
5. Reflection and goal-setting stage Based on the earlier discussion of strategies used to compensate for what was not understood, learners write goals for the next listening activity.	5. Evaluation and planning

2.3 The Theoretical Framework

The theoretical base of this study lays on the work of Flavell, (1979) the theory of metacognition. Metacognition is the knowledge we have to our own cognitive processes (our thinking). Flavell (1979) introduced the concept of metacognition, which refers to an individual's awareness and control over his/her own thinking processes. He explored how people regulate learning, memory, and problem-solving through self-reflection and cognitive monitoring. Flavell's (1979) main ideas on metacognition and learning take in to account:

Metacognitive Knowledge – This includes an individual's understanding of his/her own cognitive abilities, the learning strategies available to them, and when to apply these strategies effectively.

He suggested that metacognitive knowledge significantly influences how both children and adults approach cognitive tasks. He believed that understanding one's own thought processes allows individuals to make informed decisions about their learning and problem-solving strategies. This awareness enables them to choose, assess, modify, or even discard cognitive tasks, goals, and strategies based on their effectiveness, alignment with personal abilities, and relevance to their interests.

Metacognitive Regulation Strategies – The ability to manage one's cognitive processes by:

Planning : Choosing appropriate strategies for learning.

Monitoring : Keeping track of comprehension and progress.

Evaluating : Assessing the effectiveness of learning approaches and making improvements.

Cognitive Monitoring – Flavell (1979) emphasized that learners actively assess their understanding and memory, which helps to enhance their learning experiences.

Relevance to Learning: Students with well-developed metacognitive skills become more independent learners, better at problem-solving and more adaptable to different learning situations.

Teaching metacognitive strategies can enhance critical thinking and self-regulation. It is possible to support learners for metacognition by promoting reflection, encouraging thoughtful questioning, and explicitly teaching effective learning strategies.

Flavell's (1979) research was a foundational in shaping modern studies on self-regulated learning, cognitive development, and educational psychology.

2.4 Conceptual Framework

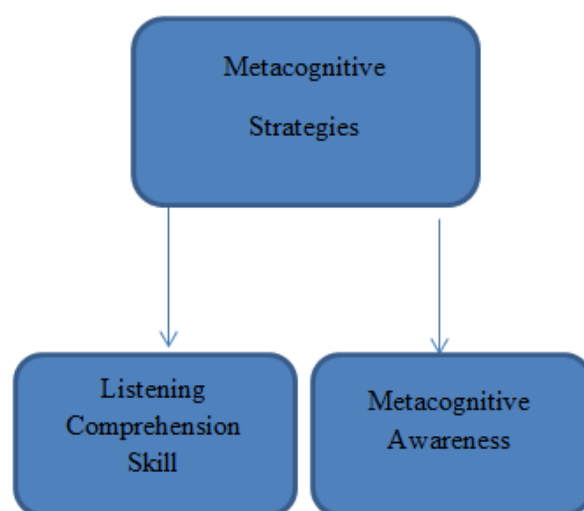


Fig. 1 Metacognitive Strategies, Listening Comprehension and Metacognitive Awareness

Figure 1 above demystifies the relationship between the independent variables and the dependent variables. It clearly shows the possible effects of the training of metacognitive strategies on the listening comprehension and metacognitive awareness of students. As indicated, the training on metacognitive listening strategies was implemented for the participant students in the control and treatment groups in order to observe the resulting changes in their listening performance and their awareness's.

3. Methodology

3.1 Participants of the study

The study was conducted in the second half of the semester in the academic year of 2024/2025. The participants of the study were selected from Kidamie Gebeya General Secondary School in the Amhara Regional State, Dessie town. It was a public school which comprised grades 9-12. From the selected school, two section students (section 11 A & 11 B) seventy in number participated in the study. These sections students were randomly assigned in the treatment and control groups. Both the treatment and control groups were selected from grade 11 students. Grade 11 students were selected for they are the highest level in secondary education before students join grade 12 where they make overall preparation and take secondary school leaving examination.

3.2 Data Gathering Instruments of the Study

Test and metacognitive awareness listening questionnaire were the main tools used to gather data in this study. The listening comprehension test was used to measure the effects of the meta-cognitive strategies on the students' listening comprehension skills. The test was prepared from texts of Grade 11 teacher's guide which was appropriate to the level of students in terms of content and vocabulary. The text of the test was recorded in to audio recordings by the English language professional with a foreign like accent. The test contains 25 questions with a multiple choice and completion items. The reliability of the test was checked by using test retest reliability and the Pearson correlation was .782. This shows a positive and greater relationship near to +1. A Metacognitive Awareness Listening Questionnaire (MALQ) was taken and adapted from previous researchers, (Vandergrift, Goh, Mareschal, & Tafaghodtari, 2006). The MALQ focuses on five strategies: planning-, directed attention, mental translation, person knowledge, and problem solving. The

reliability statistics was computed to see its appropriateness to the context the MALQ was used. It indicated a high value of reliability which was Cronbach Alpha .886. It also contains five open ended questions that are related to the listening metacognitive strategies. The questionnaire was translated in to Amharic which was the local language of the participant students. Finally, the validity of the test and MALQ was checked by the English language professionals who are teaching in the tertiary level of education and also by the English language teachers in high schools.

3.3 Data Collection Procedure

Before the implementation of the intervention training, we made discussions with the school administrators and also with the English language teachers on the ways the study was carried out in the context of the school. After the discussion, we trained the English language teacher who was involved in the intervention. We also provided a training manual for her which helped her as a guide during the intervention session. The training manual was designed based on the metacognitive pedagogical sequence of Vandergrift (2004) and on the conventional way of teaching listening. It was developed to enable the intervener teacher to implement the intervention accordingly. The manual contains the introduction of the metacognitive strategies, the lesson to be presented and the procedures to be followed and also the listening activities to be practiced in the intervention sessions.

Before the implementation of the intervention session in the school, participant students were provided comprehensive details about the study and expressed their willingness to participate in the study. Pre-test was given for both the control and treatment groups. In the test, students listened to the audio and responded the listening comprehension questions. A meta-cognitive awareness raising listening questionnaire was given for the treatment group students during the intervention. The students in the treatment group attended thirteen weeks of listening lesson sessions given by their English language teacher. The first week was used for the introduction of the metacognitive strategies to this group of students. The intervener teacher trained the participant students in the treatment group through the use of the listening metacognitive strategies by the application of Vandergrift's (2004) listening metacognitive pedagogical sequence. During the intervention, she provided the participants opportunities to be engaged in,

Pre-listening (Plan & Predict)

- Students activate prior knowledge about the topic (looking at the topic given by the trainer).
- They predict what information and new words to hear.
- They set goals for listening (specific, details, new words).

First Listening (monitor and evaluate)

- First verification stage
- Learners verify their initial predictions
- They correct their predictions, and jot down additional information understood
- They decide what to pay attention for
- They discuss with partners to compare understanding.

Second Listening (monitor and evaluate)

- Second verification stage
- Learners verify points of earlier disagreement,
- They make corrections.
- They write down additional details understood
- They have discussion, in which all class members contribute to the reconstruction of the evaluation, text's main points and most pertinent details,
- They share with reflections on how they arrived at the meaning of certain words or parts of the text.
- They answer comprehension questions or complete charts or graphic.

Third Listening (monitor, solve problems and plan)

- Final verification stage
- Learners listen to confirm or revise their understanding which they were notable to make out earlier.
- This stage helps them to consolidate complete comprehensions.
- Reflection and goal-setting stage
- Based on the earlier discussion of strategies used to compensate for what was not understood, learners write goals for the next listening activity.

Listening texts and tasks were incorporated with this pedagogical sequence. The listening texts were from grade 11 teacher's guide which contains the lessons prepared for the teaching of listening. The intervener teacher also trained the participant students in the control group without using the metacognitive listening strategies and the pedagogical sequence. After the completion of the intervention, the post-tests were given for both groups. The metacognitive awareness raising questionnaire was provided for the participant students in the treatment group.

3.4 Data Analysis

In order to answer the research questions in the study, the data collected through the tests and the MALQ were analyzed. The pre-and post-test items were analyzed by using Statistical Package for Social Sciences SPSS and paired and

independent sample t tests were used to analyze the data. The data obtained from meta-cognitive awareness listening questionnaires were analyzed by using mixed approach.

4. Results and Discussion of the Study

In this section, we emphasized on the results obtained from the tests and the metacognitive awareness listening questionnaire so as to answer the research questions in the study. To answer the research question on students listening comprehension skills, the independent and paired sample t test were computed and the mean difference in the two groups were discussed. To answer the question on the metacognitive awareness of students, the result of the metacognitive awareness raising questionnaire was briefly described.

4.1 The Independent Sample t-Test to Compare the Mean Results between the Control and Treatment Groups Before and After the Intervention

The control and treatment group participant students were given pre-and post-tests to see if there were differences between the pre- and - post intervention results of the two groups. And then, an independent sample t test was conducted to verify the differences they had. Table 1 below clearly demonstrates the differences the two groups had.

Table 1 Independent sample t test result of the control and treatment groups before and after the intervention

Pre-test Result of Control and Treatment Groups				Post-test Result of Control and Treatment Group			
t-test for Equality of Means				t-test for Equality of Means			
T	d/f	Sig. (2.tailed)	Mean difference	T	d/f	Sig. (2.tailed)	Mean difference
.143	68	.887	.073	.4054	67	.000	2.531

4.1.1 Comparisons of Pre-tests results of the Control and Treatment Groups

A pre-test was given for both of the control and treatment groups before the implementation of the intervention in order to check the equality of the participant students' listening comprehension skills. The description of table 1 above illustrated that the difference of the mean result of the pre -test of the control and treatment groups. It is indicated that the result of the mean difference of the two groups in the listening comprehension test was .073. This informs us that the listening comprehension performance of the participant students in the control and the treatment groups did not have greater variations before the intervention lesson was carried out. Similarly, the p value for the two groups was .887 which was greater than 0.05. This indicated that the results of the two groups had no significant differences. From this, it was possible to understand that the participants' students in the control and treatment groups did not have variations in their comprehension skills in the pre-intervention session of the study.

4.1.2 Comparisons of Post-tests in the Control and Treatment Groups

Similarly, table 1 above shows the result of the post-tests in the control and treatment groups after their engagement of the intervention. It illustrated the mean difference and the p value for the post-test scores of the control and treatment groups. The mean difference of the two groups was 2.531. This indicated that the mean result of the two groups brought changes after the implementation of the intervention. The p value was .000. This pointed out that there was statistically significant difference between the results of the two groups. If $p < 0.05$, it shows a significant difference between the two groups (Pallant, 2010). The mean differences for the two groups may indicate that the metacognitive listening strategies employed in the treatment group could have played roles for the changes occurred after their implementation in the intervention session.

4.1.3 Paired Sample t-Test Results of the Control and Treatment Groups Before and After the Intervention

Paired sample t test was computed for the control and treatment group participant students to see if there were significant differences in their mean results of the listening comprehension performances before and after their engagement of the intervention session.

Table 2 The paired sample t-test results of the control and treatment groups in the pre-and post-tests

Paired sample t-test result of the control Group				Paired sample t-test result of the treatment Group			
Mean differences	T	d/f	Sig. (2 tailed)	Mean Differences	T	d/f	Sig. (2 tailed)
0.314	1.146	34	.260	2.941	4.054	33	.000

Table 2 above clearly illustrates the result of the paired sample t test for the control group participant students before and after the intervention. As shown in the above table, the mean difference of the pre-and post-test result of the control group was around .314 which was very low. This informs us that the participant students' scores had no major changes in the pre- and post- intervention tests and also their listening comprehension skills had no difference in the pre and post interventions. The table also indicated $p > 0.05$. From this, it was possible to conclude that the results of the participant students did not have statistically significant differences in the pre-and post-interventions. Therefore, the result of the

mean differences and the p value indicated that the control group students showed no improvements in their listening comprehension skills before and after their engagement of the intervention session.

Table 2 above also shows the paired mean differences and the significant level of the pre and post-test results of the treatment group. As indicated, the paired mean difference of the treatment group in the pre-and post-tests exhibited differences. The paired mean difference of the pre-and post-test results was 2.941. This showed that the participants gained some kind of improvements in their listening comprehension skills. In addition to this, the p value for the group was .000. Since $p < 0.05$, the result showed that there were statistically significant differences in the pre-and post-test results of the participant students. This pointed out that the participant students in the treatment group gained some kind of positive changes after their engagement in the metacognitive listening strategy training during intervention.

This positive change in the treatment group could be as the result of the training of the metacognitive listening strategies. This result was consistent with the finding of other studies. (Movahed, 2014, Coskum, 2016 and Vandergrift, & Goh, 2022) indicated that metacognitive listening instructions play greater roles for the improvement of students listening comprehension skills.

4.2 Results of the Metacognitive Awareness Raising Questionnaire (MALQ)

The metacognitive awareness listening questionnaire was the other tool in this study. The MALQ was used to see the effects of the metacognitive listening strategies on the awareness of the participant students. The MALQ contained 21 questions with a five Likert scale.

The questions on the MALQ comprised the five listening metacognitive strategies. These include the planning, directed attention, mental translation, person knowledge and problem solving strategies. The questionnaire was dispatched twice before and after the intervention. The results of the questionnaire were analyzed by using the paired sample t test to see the effect that was observed on the awareness of the participant students. The open ended items were analyzed qualitatively.

Table 3 The Paired Sample t-test Results on the Metacognitive Listening Strategy Awareness of the Treatment Group

Paired differences						
Pre intervention MARQ and Post intervention MARQ	Mean	Std. Deviation	Std. Error Mean	T	Df	Sig. (2 tailed)
	11.264	6.838	1.172	9.631	33	.000

Table 3 above revealed that the mean differences in the awareness of the metacognitive strategies of the participant students in the pre-and post-training of listening metacognitive strategies for the teaching of the listening comprehension skill. The table indicated that there were greater variations in their awareness of the listening metacognitive strategies. The paired difference of the mean result for the pre- and- post intervention of the MALQ was 11.264. It indicated that the participant students' awareness showed greater improvements after their participation of the training of the listening metacognitive strategies in learning the listening skills. The p value in the above table (.000) also showed the presence of statistically significant differences in awareness of the participant students. This change also pointed out that the participants' awareness was raised as a result of the training they took during the intervention session. Other researchers' findings also indicated similar results on the impact of the metacognitive listening strategy training on the awareness of students.

Table 4 Comparisons of Paired-samples t-test results of each Strategy

	Mean Difference	SD	T	Df	Sig. (2tailed)
Planning	4.705	3.335	8.223	33	.000
Directed attention	2.294	2.918	4.584	33	.000
Person knowledge	5.000	2.915	1.000	33	.325
Mental translation	6.470	.567	1.140	33	.263
Problem solving	3.147	5.105	3.395	33	.002

The paired sample t-test result of the MALQ was considered to compare the improvements in the awareness of the participant student's for each strategy in the pre and post intervention. The paired sample t test result of the participant students in table 4 demonstrated that three of the strategies in the MALQ have shown improvements in the awareness of the participant students. The mean differences for the three strategies, namely planning, directed attention and problem solving, were 4.705, 3.147, and 2.294 respectively and the p value for all the three was less than 0.05. This indicated that there was significant differences in the pre and post intervention result of MALQ after the engagement of the participants in the intervention. In addition to this, the above table also revealed that the mean difference for person knowledge and mental translation is 6.740 and 5.000. The p value for them was greater than 0.05 which denotes that no statistically significant difference in the participants awareness in the two strategies before and after the intervention.

The changes occurred for planning and directed attention in the pre and post MALQ could be as a result of the practices in pedagogical sequence while the participant students plan, predict, pay attention and verify their prediction in the intervention session. During the intervention, the trainer teacher used the metacognitive pedagogical sequence which consists of different activities that can facilitate the listening skill instruction.

Directed attention strategy also showed significant difference in the pre and post intervention results. This maybe because of the intervener teacher helped the participant students to pay more attention to the listening activity through the use of pedagogical sequence which plays major roles on how they get the message focusing on the gist of the text. In addition the trainer tried to keep students concentration high through asking questions, giving cues, and motivating them to listen and share new views with the group.

The positive changes in the awareness of the participant students' problem solving strategy could be the result of the activities in the pedagogical sequence. The intervener teacher gave chances for participant students to think what they know about the text and how could they better understand the listening text. They were also sharing ideas with colleagues on the listening text. Participant Students were also encouraged to bring their background knowledge to understand the listening text. This could have played role in the development of the problem solving strategy.

As indicated in the table above, mental translation and person knowledge strategies revealed no significant differences in the pre and post interventions. The p value for both strategies was greater than 0.05. Although, the pedagogical sequence used by the intervener teacher encouraged them to be engaged and practice their listening comprehension in the target language, students still rely on mental translation of each word, phrase and expressions into their native language in order to understand the text. This could be as the result of their limited vocabulary or grammar knowledge in the target language. They also lose confidence to understand the text by focusing on the message and would think that mental translation gives them confidence to feel they understand the text easily and correctly.

Person knowledge also showed no improvement in the intervention. The participant students' belief about listening skill needs to be given much emphasis for its improvement. Their fixed mindset on the difficulty of the listening skill needs continuous work to get resolved. Ahmed A, Sahail, A & Yousef A, (p 36, 2013) reported that participants' weakness in strategy use was associated with personal knowledge represented in assessing the perceived difficulty in listening. They also experienced difficulty in assessing their self-confidence and anxiety related to English listening.

4.2.1 Analysis of the Qualitative Data

In the MALQ, the participant students in the treatment group were also asked to express their awareness of the metacognitive strategies before and after the intervention so as to consolidate the result gained from the quantitative data. The responses of the participant students to the open ended items in MALQ were analysed qualitatively.

For the question what they do before and during the English language listening lessons, prior to their participation in the intervention, the participant students indicated that they mainly listened passively to the teacher reading the text aloud to complete the questions that follow. They focused on familiar words and phrases rather than actively predicting the content based on context or clues. This revealed a traditional, teacher- centred approach to listening instruction, where the primary goal was to complete comprehension exercises after listening, with minimal engagement in pre-listening activities. As Brown (2006, p. 6) notes, such traditional methods often relied on post-listening questions, with little emphasis on developing strategic listening skills. However, after the intervention, the responses of the participant students demonstrated noticeable improvement in their awareness and use of metacognitive listening strategies. Their responses indicated greater engagement during the pre-listening phase, where they actively considered the topic, context, and overall meaning of the text.

The participant's responses for their reason of listening showed improvements after their engagement of the intervention. In the pre intervention, the responses revealed that the participants did not clarify what they want to gain from the listening activity. Most of them listened to the text to answer the questions that follow it. This indicated the little awareness that the participant students had on the purpose of listening. However, their post intervention responses indicated that the participant students began to set specific listening goals to understand main ideas or extracting detailed information. This shift reflected a move from passive listening to a more strategic, goal-oriented approach.

The responses of the participant students on the question of the challenging language skill for them revealed that their perception for the listening skill still couldn't be changed in the pre and post interventions. Majority of them thought that listening was the most difficult language skill for them. This was consistent with the result indicated in the quantitative data. In the quantitative data, it was shown that the p value for person knowledge was > 0.05 which means that there was no significant difference in the pre and post responses of MALQ. The majority of the participants reported that shortage of vocabularies, the speed of the speaker, the presence of unfamiliar words, the pronunciation of the speaker, the length of the text as some of the factors that created challenges for them. Some of the participants mentioned that the contents were boring and irrelevant for them. Maryam, K and Hamid, R (2014) and Ahmed A, Sahail, A & Yousef, A (2013) reported similar findings where person knowledge has no significant difference in the pre and post MAL. This view of students needs attention, focus and more time to help them to learn the skill with positive perceptions.

The participants were also asked about the strategies they used to facilitate their listening comprehension skills. Their reports indicated in the pre intervention, they used to focus on words and phrases they knew to understand the text. They also relied on the teacher's description of key points instead of actively identifying gist of the text on their own. However, their responses in the post intervention showed improvement in their awareness of metacognitive listening strategies. Their responses revealed that they started to set goals during the listening instruction. They learned to give priority to some parts which require more attention than others for the better understanding of the text. They predicted and discussed their prediction with their partners so as to verify what they did. They paid attention and listened the text and checked their prediction. They did comprehension questions and discussed with partners on how they did it. They

also reflected what they listened and did in the listening session. Few of the participant students described that they simply listened and did questions that follow the listening text.

The description of the participant students above indicated that the majority of them were benefited from the listening metacognitive strategy training. The intervener presented the listening lesson by using the pedagogical sequences of Vandergrift (2004) and the participant students gained some kind of experience of using the metacognitive strategies from the training that were provided during the intervention session. The participant students also learned the actual purpose of listening after their engagement of the training in the intervention session. Many of the participant students described that they listened to get the messages contained in the listening text. .

Finally, the results obtained from both the qualitative and quantitative data of the metacognitive awareness listening questionnaire were consistent and support each other. They explicitly showed that the training of the metacognitive listening strategy raised the participants' knowledge of the metacognitive strategies. The responses of many of the participant students described that they practiced different listening metacognitive strategies in different phases of listening. In the pre listening, they indicated the use of prediction of what would be in the text. They also shared their prediction with their partners. In the while listening, they checked what they predicted with what was actually found in the text. The respondents also mentioned the use of experiences, contexts and key words in order to understand the listening text. The result obtained in this study is consistent with the finding of (Movahed, 2014). He explains that metacognitive strategy training can be strongly effective in increasing students' metacognitive awareness to deal with listening tasks much more tactfully, to plan in advance for the strategies to be used and to be aware and responsible for their own learning. In addition to the positive results in MALQ, the two subcategories of the strategies namely mental translation and person knowledge require extensive time and effort to be effectively implemented and fully developed.

5. Conclusion and Pedagogical Implications

The finding of the study showed that the test scores of treatment group participant students at the end of the training indicated statistically significant difference than the control group participant students. From this, we understood that the metacognitive strategy training can have a positive effect on students' listening comprehension skills. The post intervention result of MALQ also indicated that there is statistically significant difference than the pre intervention results. In addition, the description of responses of the participant students in the intervention group for the open ended items showed that they gained some kind of positive changes in their awareness after their engagement of the training. This finding was consistent with the finding of (Taheri & Hedayat, 2018). They indicated that there was a significant improvement in participants' performance following the treatment sessions, where they learned to use metacognitive strategies for listening tasks. Additionally, the study revealed that strategy training played a crucial role in enhancing students' metacognitive awareness.

Pedagogical Implications

This study may have substantial implications for improving learner's listening comprehension skills, most importantly through the strategic and conscious use of metacognitive listening strategies. By training students to plan, monitor, and evaluate their own listening processes, teachers can help students to become more autonomous and responsible listeners. Such strategies empower learners to take control of their own comprehension, identify difficulties in real-time, and adjust their approach accordingly.

Moreover, the result of the study highlights the wider importance of learning strategies in the context of second language learning. When learners are equipped with effective learning strategies, they are more likely to succeed not only in listening skills but also in the learning of education as a whole. It also points out the importance of incorporating strategy based instruction into language curricula in order to train students how to learn, not just what to learn. Eventually, the finding of the study may enhance for a more strategy-based language instruction in second language environments.

Declaration of Competing Interest

The authors reported no potential conflicts of interest

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