

## Effects of Metacognitive Listening Strategy Training on Listening Comprehension and Strategy Use of ESL Learners

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**Abstract:** This paper reports on a quasi experimental research investigating the effects of metacognitive listening strategy training on ESL learners' listening comprehension and the metacognitive listening strategy used. The subjects of the study were 54 students enrolled in a 14-week pre-university English programme. During the training, 29 students in the experimental group were provided with a list of metacognitive strategies and their descriptions and were taught how to use them, while 25 students in the control group took the normal listening course as prescribed by the host institution. The findings of the study based on ANCOVA showed that students who underwent metacognitive listening strategy training performed slightly better than students in the control group. The difference, however, was not statistically significant. Nevertheless, they had widened their strategy repertoire and used these strategies more frequently, reflecting characteristics of good listeners.

**Key words:** Listening comprehension • Metacognitive strategies • ESL

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### INTRODUCTION

Listening is generally considered as a difficult skill by language learners [1-3]. It is also a source of anxiety for them [4-7]. This anxiety is exacerbated if the listeners are under the false impression that they must understand every word they hear resulting in a 'negative listening self-concept' which is associated with low self-confidence in listening [7].

Many of these learners attribute their problems in listening to what they perceive as their low listening ability or difficult listening texts or tasks. [5](p.178) argues that, "such attributions indicate a sense of passivity and helplessness in language learners which could easily result in them becoming demotivated, resigned to being less effective listeners". In these circumstances, offering more listening passages to language learners who find listening difficult will most likely add to their sense of failure [8, 9, 5].

[5] further explains that this difficulty with listening occurs because listening is a complex and invisible mental process. Thus, it is difficult for learners to have a clear understanding of how to go about listening in a second language and to find ways to improve their

performance.[10] (p. 561). describe these students as "learners without direction or opportunity to review their progress, accomplishments and future directions".

Listening experts argue that students should be taught how to listen by making them aware of the mental processes that are involved in listening and equipping them with effective listening strategies [11-16]. In addition, they believe that the students should be made conscious of the need to focus on using appropriate strategies of planning, monitoring and evaluating [17, 18, 19, 20, 21]. In other words, learners have to develop their metacognitive knowledge about listening as well as regulate the proper metacognitive strategies for listening.

Not much research, however, has been carried out on the effects of strategy training on listening comprehension [22, 23]. Furthermore, the few studies that have been completed in this area have produced mixed results. Some studies indicated no improvement in students' listening comprehension skills after strategy training [24] while others showed slight improvement [11]. There were also research findings that indicated significant improvement in some areas of listening only [25, 26]. Only one study [27] showed a clear benefit of strategy training but the sample size of only seven

students rendered the result unconvincing. Nevertheless, it appears that interventions that have been most successful were the ones that have included a strong metacognitive element in their research as in [28], [29], [30]. Yet, the findings of these studies lack comparability as they differ in their approach to the metacognitive strategy training (explicit and implicit) and are set in different contexts (foreign and second language).

The inconclusive results of previous studies and some methodological limitations that were associated with it call for more studies to confirm or reject previous findings and thus, this present study. More specifically, this study seeks to answer the following questions:

- Is there a difference in learners' listening comprehension performance after undergoing a metacognitive listening strategies training?
- Are there differences in learners' use of metacognitive listening strategies before and after undergoing a metacognitive listening strategies training?

**Literature Review:** There have only been a few studies that investigated metacognitive strategies in listening. The first study was carried out by [19] who was interested in developing his students' metacognitive awareness of their listening processes through a specific set of instructional procedures. In his study, 420 Canadian students in Grade four to six beginning level core French students completed listening comprehension tasks and reflective exercises which engaged them in prediction and evaluation. The results, based on students' responses to the reflective exercises and questionnaires, suggested that the activities sensitized the learners to listening processes and developed their metacognitive knowledge.

To see the effects of similar instructional procedures with adult learners, [20] carried out another study with 41 beginner-level university students of French. A teaching sequence that integrated both text-focused and metacognitive awareness-raising activities was used where the instructor guided the learners in the use of prediction through individual planning, pair-discussions and post-listening reflections. The classes were carried out over a 13 week period. Through the reflective journal entries that students completed every two weeks, the learners reported increased metacognitive knowledge and learner engagement and further commented on the motivational dimensions engendered by the success they experienced with this approach to listening.

A more recent study on metacognitive instruction was conducted by [31]. In this small-scale study, ten primary school pupils participated in eight specially designed listening lessons that followed a three-stage sequence: listen and answer, reflect-report and discuss. In the first stage which was modelled after the listening examination format, pupils listened and answered questions without any pre-listening activities. Immediately after they finished the task, the pupils went through the second stage where they were individually asked to reflect on how they had completed the listening exercises with guidance from pre-written questions on the board. In the final stage which was facilitated by the teacher, each pupil shared their reflections and their observations with the rest of the class. After eight lessons, all the pupils reported a deeper understanding of the nature and the demands of listening, increased confidence in completing listening tasks and had better strategic knowledge for coping with comprehension difficulties.

Through a set of instructional procedures that encourages the learners to reflect on the processes of listening, the learners' metacognitive awareness seems to have been raised successfully in the studies above. However, these studies did not investigate the direct effect of metacognitive instruction on learners' listening performance in terms of test scores before and after instruction.

There have only been three studies known to date that have investigated the direct effect of metacognitive instruction on listening performance through experimental research. The first one was carried out by [28] who investigated the effects of metacognitive language learning strategy training on lower achieving second language learners of Spanish. Seventy 'lower achieving' learners of Spanish were instructed in the metacognitive strategies of 'determining their task-related goal', 'identifying what strategies they might use', 'assessing how well the strategies were working' and 'selecting alternative strategies'. The training was not exclusively aimed at listening skills but the results showed that there was a significant increase in the listening test scores of the students along with vocabulary knowledge when compared to a non-intervention group. The intervention group also reported a clear increase in the perceived value of strategy use. However, despite the positive result in favour of intervention, Kohler's study was limited by the absence of a pretest, which means that the baseline ability of the subjects were not determined at the onset of the training.

The second study was conducted by [29] who measured the effects of strategy instruction on both the listening performance and self-efficacy of 68 lower intermediate learners of French in England as well as the effects of high and low-scaffolded interventions. They carried out a quasi-experimental, pretest-posttest study with two intervention groups and one comparison group (N=39). The intervention groups were the high scaffolding group (HSG=N 29) and the low-scaffolding group (LSG=N 39). The results showed that the advantage of the intervention group over the comparison group was statistically significant in terms of improvement in the listening performance. With regards to whether the amount of scaffolding matters in ensuring improvement in the listening, the results also showed that there was a statistically significant difference for the HSG gain scores. The effects of strategy instruction on self-efficacy beliefs for listening comprehension were also found to be significant between the HSG and the CG groups and the LSG and the CG groups. However, no significant difference was found in the gain scores of the LSG and HSG groups.

The researchers argued that their more positive results in relation to previous studies were obtained by focusing more on specific clusters of cognitive strategies involved in listening to a second language in combination with the metacognitive strategies of ‘monitoring’ and ‘evaluating’. They believed that individual cognitive strategies cannot be taught in isolation as successful comprehension requires a combination of strategies working together. According to them, when applied to L2 listening tasks, strategies are all part of a balanced set of tools at the disposal of the listener for him/her to apply effectively according to the demands of the tasks [28].

The most recent study was carried out by [30]. They investigated the effects of a metacognitive, process-based approach to teaching L2 listening over a semester. Their subjects were university level students learning French as a second language. The experimental group (N=59) was taught using a methodology that led learners through the metacognitive processes of prediction/planning, monitoring, evaluating and problem solving. The control group (N=47) listened to the same texts but without any guided attention to process. The result on the effect of teaching learners through this pedagogic cycle showed that the experimental group significantly outperformed the control group in the final comprehension measure. It was also found that it was the less-skilled listeners in the experimental group who made greater gains than their more skilled peers.

The positive results achieved by the last three studies discussed above seem to suggest that interventions that have been most successful were the ones that have included strong metacognitive elements in their research. For example, [28] focused on metacognitive strategies of planning, monitoring and evaluating while [29] emphasised a cluster of cognitive strategies in combination with metacognitive strategies of monitoring and evaluating. [29], on the other hand, taught metacognitive strategies through a specific metacognitive instructional cycle. Graham and Macaro’s and Kohler’s studies, however, differ slightly from that of Vandergrift and Tafaghodtari’s in their approach to the metacognitive instruction. The former trained their students to use the strategies explicitly while the latter, carried out the metacognitive strategy training implicitly. Nevertheless, despite the different approaches, all their results pointed to the beneficial effects of training learners in the use of metacognitive listening strategies.

Consequently, [32] recommends that the focus of listening strategy instruction should be at the decision-making and metacognitive levels and less at the cognitive level.

**Research Design:** This study adopted a quasi experimental design [33] which is illustrated in Table 1.

In this experiment, the training in metacognitive listening strategy (the treatment) was the independent variable and the scores from the listening test (pre and posttest scores) were the dependent variables. The experimental group received strategy training while the control group went through the normal procedures in class without the strategy training. Both groups were given two sets of pretests before the strategy training and two sets of posttests after the training. These consisted of a listening comprehension test and a metacognitive listening strategy questionnaire. Both pretest and posttest scores were compared at the end of the training to find out if there was any significant difference in their listening test scores and strategy use.

**Subjects:** The study involved students in the pre-university English language programme at the Centre for Languages and Pre-Academic Development (CELPAD), International Islamic University Malaysia.

Table 1: Nonrandomised Control Group, Pretest-Posttest Design

Group	Pretest	Independent Variable	Posttest
E	Y <sub>1</sub>	X	Y <sub>2</sub>
C	Y <sub>1</sub>	-	Y <sub>2</sub>

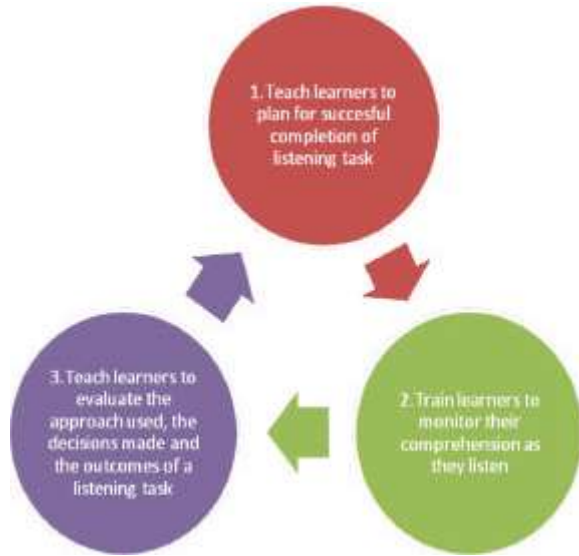


Fig. 1: Pedagogic cycle used in MLST [19]

Two intact English classes of intermediate level students were randomly assigned to the experimental (N = 29) and the control (N = 27) groups. These students were placed at the intermediate level based on their scores in the institutionalised English Proficiency Test (EPT) administered by the centre.

**Treatment:** The students in the experimental group underwent a metacognitive listening strategy training (MLST) that was integrated into the normal listening classes carried out at the centre. They followed the same course outline and scheme of work provided. Unlike their counterparts in the control group, students in the experimental group were provided with a list of metacognitive strategies and descriptions and explanations on what, when and how to use them. The class instructions incorporated [19] pedagogic cycle as in Figure 1.

To facilitate the implementation of this pedagogic cycle, learners were provided with a regulatory checklist adapted from [17], [34], [35]. This checklist was to assist learners to consciously focus on the three metacognitive listening strategies. The pre-listening questions encouraged learners to reflect on the different cognitive steps to be taken in preparing for a listening activity. The first part of the checklist (before listening) helped learners to check whether they have considered all the elements and whether they have performed all the necessary steps for success, before they began to listen. They were then given a performance checklist to help them evaluate their performance after the first listening, particularly if they

had difficulty completing the task. This self-evaluation helped them to adjust their strategies in the second attempt. When they completed the task, the questions in the last part of the checklist (after listening) guided learners into evaluating their performance as a whole and into thinking what they would do to improve their performance the next time. Learners were constantly reminded to use this checklist every time they attempted a listening task in or outside class.

### Instruments

**Listening Comprehension Test (LCT):** This test was developed by the researcher to measure the students' listening comprehension ability. A panel of experts was consulted to validate the items. To ensure that the test has construct and content validity, [36] procedures were adopted. The LCT was piloted and administered on two different groups of students to ensure its reliability. This test was conducted in both the pre and posttest. Gains in the test scores after they were given explicit strategy instruction could indicate the effectiveness of strategy training and that strategy transfer has occurred.

**Metacognitive Listening Strategy Questionnaire (MLSQ):** The MLSQ was adapted from the questionnaires of these two sources: [37] who designed The Metacognitive Awareness Listening Questionnaire (MALQ) and [38] who constructed a 52-item inventory to measure adults' metacognitive awareness. It was also subjected to a panel of experts for content validity. A reliability check to determine whether all the items in the questionnaire are measuring the same construct was carried out using the reliability analysis of Cronbach's Alpha. The questionnaire items had an overall alpha reliability of .822. The alpha reliability values for the three types of metacognitive strategies were: planning = .886, monitoring = .846 and evaluation = .690. Coefficients at these levels are considered satisfactory [33].

The MLSQ consisted of 34 items in total. Items 1-17 relate to planning strategies of which items 1-4 refer to sub-planning strategy of advance organisation, items 5-9, sub-planning strategy of selective attention, items 10-12, self-management and 13-17, directed attention. Items 18-30 relate to monitoring strategies. This strategy type composed of three sub-strategies which are comprehension monitoring, items 18-22, double-check monitoring, items 23-24 and problem solving, items 25-30. The last type of metacognitive strategy, evaluation is divided into two sub-strategies of performance evaluation, items 31-33 and strategy evaluation, item 34.

The MLSQ was given to all students in both experimental and control groups as a pretest before the training and as a posttest at the end of the training. This was to find out whether the learners use metacognitive listening strategies in the pre- and posttests. More importantly it was used to check the patterns of metacognitive listening strategy used.

**Data Analyses:** The pretest and posttest scores from the LCT and the MLST were first analysed using SPSS exploratory data analysis tool (EDA) to establish its normality. The data was then subjected to parametric test analysis by utilising the SPSS applications for analysis of covariance (ANCOVA) and paired-samples *t*-test.

## RESULTS

**Research question 1:** Is there a difference in learners' listening comprehension performance after undergoing a metacognitive listening strategies training?

In order to find out if the training makes an impact on the students' performance in listening comprehension, a one-way between-group analysis of covariance (ANCOVA) was conducted. In this test, the adjusted posttest mean scores of both experimental and control groups were compared to ascertain the effectiveness of the treatment (metacognitive listening strategy training) on the students' performance in the LCT. The pretest scores were used as the covariate in this analysis. Table 1 shows the ANCOVA result.

The ANCOVA result [ $F(1, 54) = .29, p = .60$  at .05 alpha level, partial eta squared = .01] shows that there is no significant difference in the adjusted posttest mean scores of the listening test scores for both the experimental and control groups. Thus, it can be deduced that metacognitive listening strategy training has not made a significant impact on the students' performance in the LCT. However, the adjusted posttest mean score for the experimental group is slightly higher than those of the control group as can be seen in the table above.

**Research question 2:** Are there differences in learners' use of metacognitive listening strategies after undergoing a metacognitive listening strategies training?

The first set of paired sample *t*-test was conducted on the total mean scores of strategies at pre and posttest to show within group comparisons. The results (refer to Table 2) show that there was a significant difference  $t(28) = -2.83, p = .009$  in the total strategy use mean scores of the students in the experimental group between pretest ( $M = 4.65, SD = .47$ ) and posttest ( $M = 4.91, SD = .40$ ). The result was not significant for the control group. This suggests that in general, the students in the experimental group significantly used more strategies after the training compared to the control group.

To find out which specific main metacognitive strategy types that have increased in their use by the learners, paired samples *t*-test were performed on strategy use mean scores of the three main types of strategies namely *planning*, *monitoring* and *evaluation*.

Table 1: ANCOVA result of LCT post test scores

	ANCOVA Result					
	Mean	SE	F	df 1	df 2	p
Exp.gr (N=29)	28.41 <sup>a</sup>	.72				
Ctrl.gr (N=27)	27.87 <sup>a</sup>	.74	.29	1	54	.60

a. Covariates appearing in the model are evaluated at the following values: pre = 20.26

Table 2: Results of paired-sample *t*-test for total strategy use score between experimental and control groups

Group		Paired-differences (pre-post)				
		mean	SD	t	df	p
Experiment	pre	4.648	.466			
	post	4.905	.401	-2.831	28	.009*
Control	pre	4.624	.443			
	post	4.749	.349	-1.912	25	.067

Table 3: Results of paired-samples t-test for main categories of strategy use score for experimental group

Main-category		Paired-differences (pre-post)				
		mean	SD	t	df	p
Planning	pre	4.671	.456			
	post	4.872	.441	-2.192	28	.037*
Monitoring	pre	4.554	.581			
	post	4.913	.473	-3.562	28	.001*
Evaluation	pre	4.853	.757			
	post	5.017	.530	-1.084	28	.288

Table 4: Results of paired-samples t-test for main categories of strategy use score for control group

Main-category		Paired-differences (pre-post)				
		mean	SD	t	df	p
Planning	pre	4.597	.472			
	post	4.677	.427	-1.006	25	.324
Monitoring	pre	4.648	.494			
	post	4.825	.412	-2.002	25	.056
Evaluation	pre	4.657	.766			
	post	4.824	.631	-1.243	26	.225

Table 5: Results of paired-samples t-test for sub-categories of strategy use score for experimental group

Sub-category		Paired-differences (pre-post)				
		mean	SD	t	df	p
Advance Organisation	pre	4.759	.425			
	post	4.879	.706	-.951	28	.350
Selective Attention	pre	4.628	.647			
	post	4.910	.512	-2.429	28	.022*
Self-management	pre	4.770	.882			
	post	4.906	.900	-.625	28	.537
Directed Attention	pre	4.586	.730			
	post	4.814	.588	-1.893	28	.069
Comprehension Monitoring	pre	4.420	.649			
	post	4.731	.608	-2.437	28	.021*
Double-check Monitoring	pre	4.672	.889			
	post	5.293	.701	-3.702	28	.001*
Problem Solving	pre	4.626	.712			
	post	4.937	.476	-2.459	28	.020*
Performance Evaluation	pre	4.713	.853			
	post	4.977	.604	-1.587	28	.124
Strategy Evaluation	pre	5.276	.841			
	post	5.138	1.059	.548	28	.588

The results in Table 3 show that students in experimental group show a significant increase in the use of two types of strategies which are *planning* (p=.037) and *monitoring* (p=.001). The results for the control group in Table 4, in contrast, did not show any significant difference.

Further paired-samples t-tests according on sub-categories of strategies were conducted in order to identify which specific sub-categories of strategies that were used more by the students after the training. Tables 5 and 6 reveal the results of paired-samples t-tests for both groups of students.

Table 6: Results of paired-samples *t*-test for sub-categories of strategy use score for control group

Sub-category		Paired-differences (pre-post)				p
		mean	SD	t	df	
Advance Organisation	pre	4.398	.589			
	post	4.668	.632	-2.210	26	.036*
Selective Attention	pre	4.631	.659			
	post	4.569	.673	.403	25	.691
Self-management	pre	4.821	.972			
	post	4.782	.718	.225	25	.824
Directed Attention	pre	4.561	.543			
	post	4.723	.580	-1.692	25	.103
Comprehension Monitoring	pre	4.393	.671			
	post	4.600	.560	-1.600	26	.122
Double-check Monitoring	pre	4.789	.982			
	post	5.173	.761	-1.832	25	.079
Problem Solving	pre	4.782	.605			
	post	4.891	.485	-.921	25	.366
Performance Evaluation	pre	4.531	.741			
	post	4.667	.673	-.983	26	.335
Strategy Evaluation	pre	5.037	1.126			
	post	5.296	.669	-1.369	26	.183

The results show that there was a significant difference in the strategy use mean score of 4 sub-categories of strategies for the experimental group namely *selective attention*( $p=.022$ ), a sub-category of planning strategy and 3 sub-categories of monitoring strategy which are *comprehension monitoring*( $p=.021$ ), *double-check monitoring*( $p=.001$ ) and *problem solving*( $p=.020$ ). There was only one sub-category of strategy that reveals a significant difference in its use by the students in the control group which is *advance organisation*, a sub-category of planning strategy.

Results from the analyses of MLSQ responses appear to show that students, whether from experimental or control group, reported to have used all the different types of strategy as indicated by the strategy use mean score on total strategies which is for experimental (pre 4.65, SD=.47; post 4.91, SD=.40) and for control (pre 4.61, SD=.44; post 4.75, SD=.35). However, for the experimental group, after the training, their use of two main categories of strategy which are *planning* and *monitoring* seemed to have increased, statistically significant at  $p<0.05$  level. None of these strategies reported any change in use by the learners in the control group. For specific sub-categories of strategy, there was a significant increase ( $p<0.05$ ) in *selective attention*, *comprehension monitoring*, *double-check monitoring* and *problem solving* for the experimental group. As for the control group, there was a significant increase in the use of *advance organisation*.

## DISCUSSION

**Effects of MLST on Listening Comprehension:**  
The findings of this study indicate that the adjusted posttest mean score for the experimental group is slightly higher than those of the control group. However based on ANCOVA, there was no significant difference in the listening test scores of the students who followed the training and the students in the control group. It appears that the MLST has not made a significant impact on the listening performance of the students. The limited success of strategy training in the present study concurs with the results of studies by [23],[24],[39] but did not support the findings of [28],[29],[31] studies that showed an unequivocal benefit of strategy training. This could be explained by many factors.

The easiest explanation could be attributed to insufficient training. The students had a total of eighteen hours of MLST and this might not be enough when one considers the complexity of the tasks which confront L2 learners in a listening comprehension strategy course. [40] maintained that length of training may play a significant role in the effectiveness of a strategy training programme, although the success or lack of success of strategy training cannot be attributed solely to the length of training. Nonetheless, as listening comprehension is a skill which many ESL students do not actively practice outside of the classroom setting, it is reasonable to expect that gains may be made very slowly. This correlates well

with [41] caution that the teaching of strategies will involve a considerable investment in time and effort in order to be effective. Basing their arguments on the cognitive learning theory, they stated that similar to any other complex cognitive skills, a strategy has to go through the cognitive, associative and autonomous stage of learning before it can become proceduralised. Since metacognitive listening strategies are considered executive or higher order strategies, it might require even longer time for learners to gain sufficient practice before they become proceduralised.

Another possible reason why the training might not be as effective has to do with motivational issues. Many students were of the opinion that listening was not as important as their writing, reading and grammar classes and thus, there were problems with attendance with some of the students, especially for the eight o'clock morning class. Considering that the treatment consisted of only 18 hours, each lesson was especially important. It goes without saying that in order for training to be effective, students must at least be physically present.

One other reason is that the study might have been affected by a 'diffusion of treatment' threat. Although the students were not informed that they were involved in a research, there was a great possibility that they interacted with one another at some point as some of them shared the same class for other subjects or they stayed in the same hostel. For this reason, they might have informed one another about what transpired in their listening classes or the students from the experimental group might have shared the handouts or listening materials that were used in their listening class. Although the students in the control group were not given the MLST, they might have heard about it from their counterparts in the experimental group or might have benefitted indirectly from it as well.

Furthermore, the fact that the students in the control group had been given the MLSQ might have influenced the outcome of the post test as well. This is because the exposure to the items in the questionnaire might have unintentionally raised their awareness about metacognitive listening strategies. At the same time, the exposure might have influenced them to use these strategies even without the formal training and, subsequently, improved their listening performance. While it is not possible to assess the degree of influence this factor may have had on the posttest outcomes, it is reasonable to expect that it had some impact on it.

Effects of MLST on Strategy Use: The paired-samples *t*-test comparing the total mean of strategy use between pre and posttest yielded a significant difference for the experimental group only. When further paired-samples *t*-

tests conducted on the the main types of metacognitive listening strategy use, it was revealed that the use of planning and *monitoring* strategies by the experimental group seemed to have increased significantly after the MLST. As far as the control group is concerned, there was no significant difference found in any of the main types of strategies. When the same test was performed on the nine sub-categories of strategies, the results indicate that at posttest, there was a significant difference in the use of *selected attention*, *comprehension monitoring*, *double-check monitoring* and *problem solving* by the experimental group after the training. In contrast, of 9 sub categories, only *advance organisations* showed a significant difference for the control group. It can be deduced from these findings that MLST, to a certain extent, had been effective at making the learners in the experimental group use more of the strategies not only in terms of types, but also, in frequency. The changes in strategy use for the control group, however, were minimal.

The significant increase in the use of *monitoring* strategy evident in the MLSQ responses could be an indication of the MLST success. It has been reported in studies that distinguished skilled and less-skilled listeners, the high use of *monitoring* strategy is a characteristic of high ability listeners [19, 22, 39, 42, 43, 44]. Therefore, it could be argued that the MLST has managed to help the learners become better listeners as they seemed to use more metacognitive strategies associated with good listeners after the training.

## CONCLUSION

Learning to listen in a language that one is not familiar with is hard work. Language learners, like all novices, need to be guided and supported in their efforts to achieve success. The main aim of the MLST is to teach students *how* to listen as this knowledge is probably what is lacking in most students who found listening in ESL a challenge, as in the case of the subjects in this study. By encouraging the learners to engage in metacognitive strategies of planning, monitoring and evaluating, learners no longer became passive recipients of instruction, instead, the responsibility for learning shifted from the teacher to the students. Using MLST in the listening class not only provides the students with the knowledge and control over their listening process, but it also enhances their motivation [19].

Due to the contradictory findings of the study, it may be premature to state that there is a causal relationship between metacognitive strategy use and listening



comprehension. More research replicating this study should be carried out in the future to conclusively determine whether such relationship exists. Nevertheless, the training was successful in increasing the metacognitive awareness of the learners about their listening processes, which is a step closer to turning them into self-regulated listeners.

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