CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

The obtained results and findings of this study provided useful insights on the impact of metacognitive strategies on the listening performance of Malaysian ESL learners in the IELTS listening preparatory course. The obtained quantitative and qualitative results are presented and discussed in the following sections according to the following research questions:

i) What is the level of awareness on metacognitive strategies between the participants in the experimental group and control group?

ii) How do the IELTS listening test scores of the participants in the experimental group differ from the IELTS listening test scores of the participants in the control group?

iii) What do the participants think about the use of metacognitive strategies in the IELTS listening preparatory course?

4.2 Awareness on Metacognitive Strategies

With respect to the first objective of this study, the following research question (RQ1) was addressed. In order to examine the level of awareness on metacognitive strategies between the participants in the experimental group and control group, the use of metacognitive strategies among the ESL learners in the IELTS listening preparatory course were assessed. The MALQ data and learners' checklist from the pre-experimental stage and post-experimental stage were analysed and discussed in the following subsections.

RQ1: What is the level of awareness on metacognitive strategies between the participants in the experimental group and control group?

The 21-item MALQ was used in this study to elicit information on the level of awareness on metacognitive strategies among the participants in the experimental group and control group. In particular, the MALQ data were used as the main data. Any improvements in the level of awareness after the treatment of metacognitive strategies and conventional instruction were identified at this point. In other words, the MALQ data were used to countercheck the level of awareness on metacognitive strategies in listening comprehension among the participants before and after the treatment (i.e., explicit instruction of metacognitive strategies for the experimental group; conventional instruction for the control group). Meanwhile, the learners' checklist (during the intervention stage) was used as supporting data (for MALQ data). The differences between the control group and experimental group during the pre-test and post-test were analysed according to the identified metacognitive strategies, specifically planning and evaluation, directed attention, person knowledge, mental translation, and problem-solving strategies.

4.2.1 Experimental group

Figure 4.1 presents the obtained results on the use of metacognitive strategies among the participants in the experimental group (n = 75) in percentage during the pre-experimental stage and post-experimental stage. The results of MALQ revealed that mental translation strategy (37.30%) was the most used metacognitive strategy among the participants in the experimental group during the pre-experimental stage, followed by directed attention strategy (36.00%). Meanwhile, problem-solving strategy (2.67%) was the least used metacognitive strategy among the participants in the experimental group. The other metacognitive strategies used included person knowledge strategy (13.36%) and planning and evaluation strategy (10.67%).

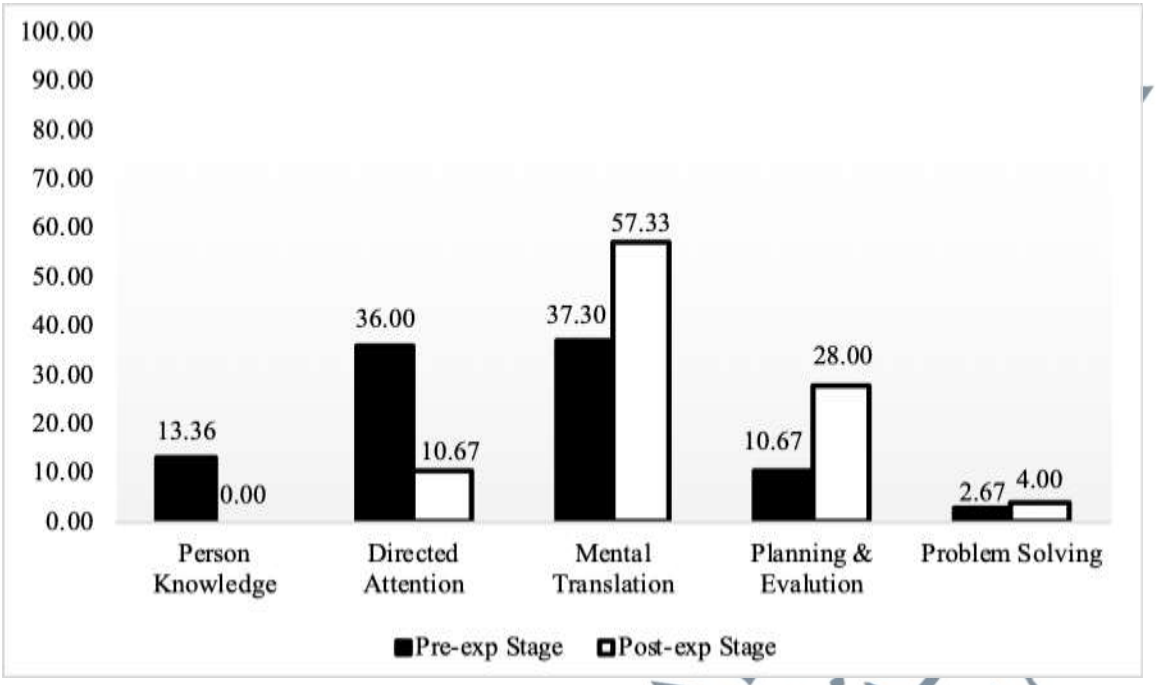

Figure 4.1: Responses of the experimental group in MALQ

The participants in the experimental group were required to complete the MALQ during the post-experimental stage. The obtained results which are presented in Figure 4.1, revealed an increase in the use of mental translation strategy (57.33%), planning and evaluation strategy (28.00%), and problem-solving strategy (4.00%) among the participants. However, directed attention strategy (10.67%) and person knowledge strategy (0.00%) were less used during the post-experimental stage compared to the pre-experimental stage.

After the participants in the experimental group received explicit instruction to apply metacognitive strategies for their listening skills, they demonstrated more advancement in using and adjusting their interpretation. The above results demonstrated increase in the use of mental translation strategy and planning and evaluation strategy among the participants, which reflected the awareness on these two metacognitive strategies. Additionally, there was also a slight increase in the awareness on problem-solving strategy, but limited awareness on directed attention strategy. None of the

participants was aware of person knowledge strategy during the post-experimental stage. In short, although the awareness on metacognitive strategies was rather low during the pre-experimental stage, the participants were able to apply certain metacognitive strategies after the intervention stage.

4.2.2 Control group

Figure 4.2 presents the obtained results on the use of metacognitive strategies among the participants in the control group (n = 75) in percentage during the pre-experimental stage and post-experimental stage. The results of the MALQ revealed that directed attention strategy (38.67%) was the most used metacognitive strategy among the participants in the control group during the pre-experimental stage, followed by mental translation strategy (26.67%), person knowledge strategy (21.33%), and planning and evaluation strategy (13.33%). Meanwhile, problem-solving strategy (0.00%) was not used among the participants in the control group during the experimental stage.

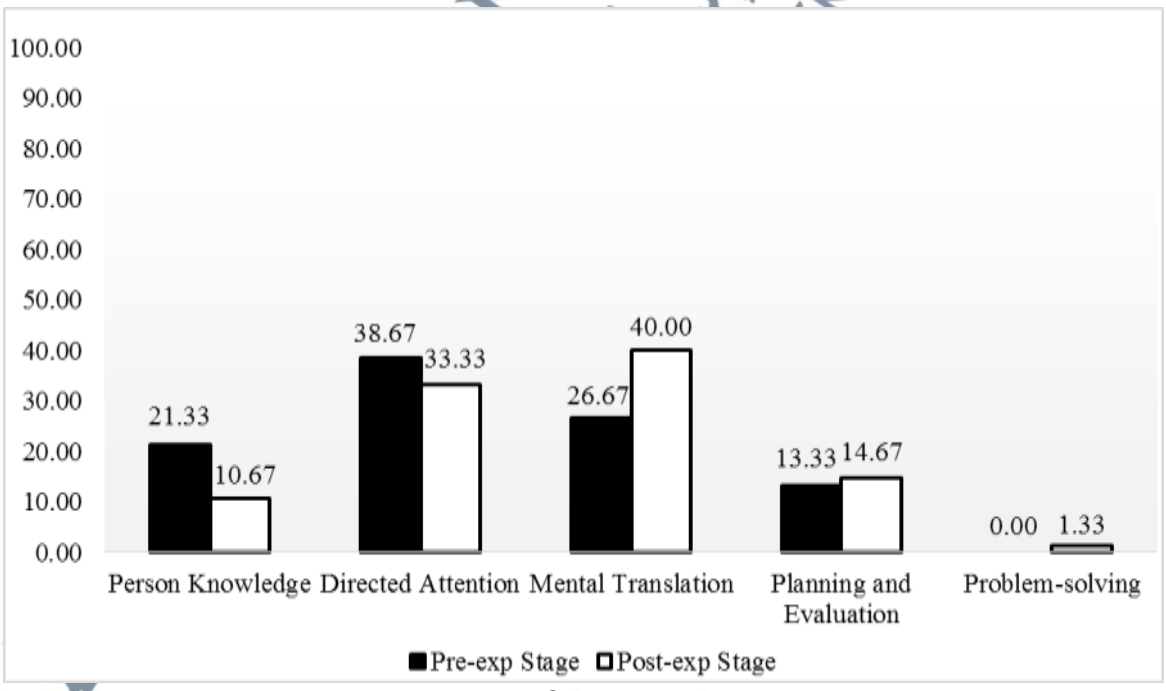

Figure 4.2: Responses of the control group in MALQ

The obtained results revealed an increase in the use of mental translation strategy (40.00%), planning and evaluation strategy (14.67%), and problem-solving strategy (1.33%) among the participants in the control group during the post-experimental stage. Meanwhile, directed attention strategy (33.33%) and person knowledge strategy (10.67%) were less used during the post-experimental stage compared to the pre-experimental stage.

The above results indicated a paradoxical use of metacognitive strategies among the participants in the control group. The directed attention, mental translation, and person knowledge strategies were among the most used strategies during the pre-experimental stage. Meanwhile, the participants mainly used mental translation, planning and evaluation, and problem-solving strategies during the post-experimental stage. The subsequent subsection presents the results of item analysis for each item of MALQ.

4.2.3 Item analysis of MALQ and the learners' checklist

The 21-item MALQ was used in this study to elicit information on the level of awareness on metacognitive strategies among the participants in the experimental group and control group. In particular, the MALQ data were used as the main data. Any improvements in the level of awareness after the treatment of metacognitive strategies and conventional instruction were identified at this point. The items of the MALQ were categorised based on table 3.7. The learner's checklist was used as a supporting data which was gathered from the experimental group during the intervention stage. The items from the learner's checklist was matched with the items from the MALQ.

4.2.3.1 Planning and evaluation strategy

The MALQ items 10, 14 and 20 for the planning and evaluation were categorised based on MALQ Scoring Scheme (refer to Appendix F). Table 4.1 presents the responses of the participants in the experimental group and control group on Item 10 (*Before*

listening, I think of similar items I have listened to) during the pre-experimental stage and post-experimental stage. Evidently, most of the participants in both groups agreed that they use their prior knowledge of listening texts before the listening tasks, as shown by the number of participants in percentage who responded, "strongly agree", "agree", and "partly agree". Besides that, the number of participants in the experimental group who strongly agreed to the statement increased from 3.3% (pre-test) to 16.7% (post-test). Likewise, a significant increase from 36.7% (pre-test) to 43.3% (post-test) was demonstrated among those in the experimental group who responded "agree". However, the number of participants in the control group who strongly agreed to the statement decreased from 6.7% (pre-test) to 3.3% (post-test). Similarly, the number of participants in the control group who agreed to the statement significantly decreased from 33.3% (pre-test) to 13.3% (post-test).

Table 4.1: Responses for Item 10

Response	Pre-experimental stage		Post-experimental stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	6.7	3.3	3.3	16.7
Agree	33.3	36.7	13.3	43.3
Partly agree	40.0	33.3	56.7	26.7
Slightly disagree	13.3	16.7	16.7	13.3
Disagree	6.7	10.0	10.0	-
Strongly disagree	-	-	-	-
Total	100	100	100	100

Table 4.2 presents the responses of the participants in the experimental group and control group on Item 14 (*After listening, I think back of how I listened and about how I might do differently next time*) during the pre-experimental stage and post-experimental stage. Most of the participants in both groups responded "strongly agree", "agree", and "partly agree". In particular, the participants in the experimental group generally agreed that they use their prior knowledge of listening texts equally before and after the listening

task. The number of participants in the experimental group who agreed to the statement slightly increased from 20.0% (pre-test) to 23.3% (post-test). This may be contributed by the participants who were exposed to various listening texts during the intervention stage. However, the number of participants in the same group who indicated "partly agree" decreased from 50.0% (pre-test) to 40.0% (post-test). On the other hand, the participants in the control group revealed otherwise. In particular, the number of participants in the control group who strongly agreed to the statement remained constant at 13.3% whereas the number of participants in the control group who indicated "agree" to the statement increased from 30.0% (pre-test) to 33.3% (post-test).

Table 4.2: Responses for Item 14

Response	Pre-experimental stage		Post-experimental stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	13.3	3.3	13.3	10.0
Agree	30.0	43.3	33.3	46.7
Partly agree	46.7	33.3	30.0	26.7
Slightly disagree	6.7	20.0	13.3	13.3
Disagree	3.3	-	3.3	3.3
Strongly disagree	-	-	6.7	-
Total	100	100	100	100

Table 4.3 presents the responses of the participants in the experimental group and control group on Item 20 (*I have a goal in mind as I listened*) during the pre-experimental stage and post-experimental stage. Majority of the participants in both groups agreed that they use their prior knowledge of listening texts before the listening tasks based on the percentages of those who responded "strongly agree", "agree", and "partly agree". In particular, the number of participants in the experimental group who strongly agreed to the statement significantly increased from 16.7% (pre-test) to 26.7% (post-test). Meanwhile, the number of participants in the experimental group who responded "agree" slightly increased from 20.0% (pre-test) to 40.0% (post-test). Similar to the prior results, the

responses of the majority of the participants in the control group contradicted the responses of the participants in the experimental group. Despite that, the number of participants in the control group who responded "strongly agree" slightly increased from 6.7% (pre-test) to 10.0% (post-test). Likewise, the number of participants in the control group who responded "agree" doubled up from 20.0% (pre-test) to 40.0% (post-test).

Table 4.3: Responses for Item 20

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	6.7	16.7	10.0	26.7
Agree	20.0	20.0	40.0	23.3
Partly agree	66.7	50.0	26.7	40.0
Slightly disagree	3.3	10.0	3.3	10.0
Disagree	3.3	3.3	13.3	-
Strongly disagree	-	-	6.7	-
Total	100	100	100	100

Discussion

Referring to Table 4.4, the learners' checklist before listening for Q4, which revealed the progress of the participants during the intervention stage, further supported the above MALQ results. In general, the participants revealed that they think of similar texts that they have listened to and subsequently make predictions before they start listening. Referring to Table 4.5, the learners' checklist after listening for Q10 further supported the obtained MALQ results. In general, the participants revealed that they revised their predictions as required after each listening session.

Table 4.4: Learners' checklist before listening (Q4)

Before Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I have made my predictions about what I think I might hear.	20	80	50	50	80	20	80	20	100	-	100	-

Table 4.5: Learners' checklist after listening (Q10)

After Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I revised my predictions as required.	30	70	60	40	70	30	90	10	100	-	100	-

Overall, the participants in the experimental group demonstrated the propensity of applying the planning and evaluating strategy for the listening tasks after the intervention. In general, the participants in the experimental group thought of similar listening task that they had previously listened to before they took on the listening task where they evaluated their answers and had specific goals in mind.As shown in Figure 4.1, it was evident that the participants in the experimental group demonstrated an improvement in their awareness on planning and evaluation strategy with the increase of its use from 10.67% to 28.00%. Similarly, the above MALQ results reaffirmed the awareness of participants in the experimental group in connecting their schemata which were similar to the listening task that they have listened to or read prior with the current exercises they attempted.

Their awareness on planning and evaluation strategy was in line with the metacognition theory (Flavell, 1979) where using the metacognitive strategies, learners are able to manage the input, storage, and search and retrieval of the contents in memory. Furthermore, majority of the participants were prepared to pay attention and concentrate on what they heard during the listening tasks. The results showed that the majority of the participants in the experimental group agreed that they think back of how they listened and how they might do differently next time after the listening tasks further. This reaffirmed the claim that was postulated by Goh (2008), specifically on the ability of learners to critically evaluate the input they receive when listening in order to decide whether to retain or filter the necessary learning style. On a similar note, the results also supported the claim that was made by Vandergrift (2002) where listeners use the metacognitive strategies to

improve listening skills when they are able to evaluate the success of their learning approach. As shown in Table 4.5, majority of the respondents agreed on revising their predictions after listening, if necessary (during the intervention stage).

On the contrary, the participants in the control group only showed a slight increase in the use of planning and evaluation strategy from 13.33% to 14.67% (Table 4.1). The overall results from the control group clearly demonstrated that the participants either failed or were undecided on how to evaluate their listening performance compared to the participants in the experimental group (after the intervention stage).

However, the obtained results of the present study appeared to contradict the claim that was made by Sheorey and Mokhtari (2001). These researchers opined that ESL listeners are more likely to use all metacognitive strategies, which include planning and evaluation, directed attention, person knowledge, and problem-solving. The present study found that the participants in the experimental group preferred using mental translation strategy and planning and evaluation strategy. It was deemed necessary to highlight appropriate metacognitive strategies for listening in order to guide ESL listeners to adopt the required listening skills that boost their listening proficiency. This study postulated the close link between the information-processing theory and the means of engagement and input processing through selective strategies among the learners. By comparing the improvement in the selected metacognitive strategies according to the choices made by the learners themselves could facilitate the learners to become better learners. Ultimately, they would be able to successfully score better grades in the listening component of the IELTS examination.

4.2.3.2 Directed attention strategy

The MALQ items 2, 6, 12 and 16 for the directed attention strategy were categorised based on the MALQ Scoring Scheme (refer to Appendix F). Table 4.6 presents

the responses of the participants in the experimental group and control group on Item 2 (*I focus harder on the text when I have problem understanding*) during the pre-experimental stage and post-experimental stage. Evidently, majority of participants agreed that they use their prior knowledge of listening texts before the listening tasks, as shown by the number of participants in percentage who responded "strongly agree", "agree", and "partly agree". As for the experimental group, the number of participants who agreed to the statement slightly increased from 40.0% (pre-test) to 46.7% (post-test) whereas the number of participants who partly agreed to the statement doubled up from 10.0% (pre-test) to 20.0% (post-test). Meanwhile, the control group presented different results in this study. There was a decrease in the number of participants who responded "strongly agree" from 26.7% (pre-test) to 16.7% (post-test). However, the number of participants who responded "agree" doubled up from 36.7% (pre-test) to 63.3% (post-test). Based on the responses given, the participants had to focus harder when they encountered problems during the listening task. It is crucial to get back on track in order to sustain their attention on the questions or tasks given.

Table 4.6: Responses for Item 2

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	26.7	46.7	16.7	30.0
Agree	36.7	40.0	63.3	46.7
Partly agree	23.3	10.0	13.3	20.0
Slightly disagree	10.0	3.3	-	3.3
Disagree	3.3	-	-	-
Strongly disagree	-	-	6.7	-
Total	100	100	100	100

Table 4.7 presents the responses of the participants in the experimental group and control group on Item 6 (*When my mind wanders. I recover my concentration right away*) during the pre-experimental stage and post-experimental stage. Evidently, the majority of

participants agreed that they use their prior knowledge of listening texts before the listening tasks, as shown by the number of participants in both groups who responded "strongly agree", "agree", and "partly agree". The tabulated results revealed a significant increase from 6.7% (pre-test) to 16.7% (post-test) among the participants in the experimental group who responded "strongly agree". Meanwhile, the participants in the same group who responded "agree" remained constant (36.7% in pre-test and post-test). On the contrary, the participants in the control group responded differently. The number of participants who responded "strongly agree" slightly decreased from 13.3% (pre-test) to 10.0% (post-test). As for those who agreed to the statement, the number of participants in the control group remained similar at 40.0%.

Table 4.7: Responses for Item 6

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	13.3	6.7	10.0	16.7
Agree	40.0	36.7	40.0	36.7
Partly agree	33.3	46.7	40.0	43.3
Slightly disagree	10.0	10.0	3.3	3.3
Disagree	3.3	-	3.3	-
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Meanwhile, Table 4.8 presents the responses of the participants in the experimental group and control group on Item 12 (*I try to get back on track when I lose concentration*) during the pre-experimental stage and post-experimental stage. Evidently, most of the participants also agreed that they use their prior knowledge of listening texts before the listening tasks, as shown by the number of participants in both groups who responded "strongly agree", "agree", and "partly agree". In particular, the number of participants in the experimental group who responded "strongly agree" slightly increased from 26.7% (pre-test) to 30.0% (post-test) but those who responded "agree" slightly decreased from

40.0% (pre-test) to 36.7% (post-test). On the other hand, the number of participants in the control group who strongly agreed to the statement during the pre-test and post-test was similar at 16.7%, while those who responded "agree" increased from 33.3% (pre-test) to 46.7% (post-test).

Table 4.8: Responses for Item 12

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	16.7	26.7	16.7	30.0
Agree	33.3	40.0	46.7	36.7
Partly agree	40.0	23.3	23.3	30.0
Slightly disagree	10.0	10.0	10.0	3.3
Disagree	-	-	3.3	-
Strongly disagree	-	-	16.7	-
Total	100	100	100	100

Table 4.9 presents the responses of the participants in the experimental group and control group on Item 16 (*When I have difficulty understanding what I hear, I give up and stop listening*) during the pre-experimental stage and post-experimental stage. Evidently, most of the participants in both groups also agreed that they use their prior knowledge of listening texts before the listening tasks, as shown in the number of participants who responded "strongly agree", "agree", and "partly agree". In particular, the number of participants in the experimental group who strongly agreed to the statement significantly increased from 13.3% (pre-test) to 40.0% (post-test). Likewise, the number of those who responded "agree" significantly increased from 10.0% (pre-test) to 33.3% (post-test). As for the control group, the number of participants who responded "strongly agreed" (from 6.7% to 10.0%) and "agree" (from 23.3% to 30.0%) also increased as well.

Table 4.9: Responses for Item 16

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	6.7	13.3	10.0	40.0
Agree	23.3	10.0	30.0	33.3
Partly agree	26.7	26.7	33.3	10.0
Slightly disagree	36.7	30.0	16.7	10.0
Disagree	6.7	20.0	6.7	6.7
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Discussion

Apart from the mental translation strategy, directed attention strategy was the next most used strategy among the participants. Although Vandergrift (2002) highlighted that listeners must avoid using mental translation strategy to become skilled listeners, the use of this strategy remains more prominent in an ESL setting, which was demonstrated in the present study. The participants in this study expressed their preference to use mental translation strategy and directed attention strategy compared to other metacognitive strategies. The obtained MALQ results demonstrated the capability of the participants in using specific metacognitive strategies in order to ascertain their success in the test.

The above strategies represent an effective and efficient approach for beginner-level learners to master listening skills—they often feel compelled to use these strategies. Less proficient listeners tend to use both of these strategies compared to proficient listeners since the mental translation strategy and directed attention strategy are perceived as a more natural listening process. The responses towards these two strategies in the MALQ among the participants reflect their awareness on metacognitive strategies. The present study also proved that learners can be rather selective towards certain strategies that they consider more effective in facilitating and improving their listening skills. For instance, under the directed attention category, the majority of participants agreed that they focused harder on

the listening texts when the texts were too difficult for them to understand. Referring to the obtained results from table 4.7 of the item analysis, the numbers of participants who responded "strongly agree" and "agree" were among the highest. Additionally, the participants also indicated that they did not give up easily or stopped listening when they encountered difficulty in understanding the listening texts. In other words, the participants were aware of their listening ability and engaged seriously in the listening activity.

The obtained MALQ results in this present study contradicted the claim that was postulated by Vandergrift (2002), whereby a successful listener must be able to activate the appropriate listening processes as required according to the given task or situation. Referring to the following table, the majority of participants gave up and stopped listening when they encountered difficulty in the given listening tasks. Comprehension plays an important role in keeping ESL learners to stay focus, especially when the task becomes more challenging. Therefore, the level of complexity of a listening task for IELTS ESL listeners should be set according to the level of their language comprehension in stages (from easy to difficult) to ensure that they are able to improve their listening skills.

Referring to Table 4.10, the learners' checklist before listening for Q1 further supported the above MALQ results. In general, the participants revealed the difficulty to understand what they hear, resulting in them giving up and eventually stop listening before they even start the listening task.

Table 4.10: Learners' checklist before listening (Q1)

Before Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I understand what I have to do after listening and I have asked the teacher for clarifications as required.	40	60	100	-	80	20	90	10	100	-	100	-

Nevertheless, the obtained results in Table 4.11 further supported that the participants concentrated on the listening task. As previously shown in table 4.7, the participants in the experimental group revealed that they directed their attention after being treated with explicit instruction of metacognitive strategies. In other words, they displayed better ability compared to the other participants who were undecided on whether they were able to recover concentration when their mind wandered off while listening. This was in line with the findings of Bozorgian (2014), whereby when a listener is unable to maintain attention on what he or she is listening, he or she may not feel interested to pay attention and focus on the given listening tasks.

Table 4.11: Learners' checklist after listening (Q8)

After Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I concentrated on the listening task.	100	-	100	-	100	-	100	-	100	-	100	-

Hence, the obtained results on Q8 reaffirmed the importance of concentration when it comes to listening for language learners, which can be seen as a motivating factor for listeners to focus on listening. On a similar note, the findings of Marrapodi (2006) also supported the above notion whereby metacognitive strategies require learners to apply deep processing in the process of acquiring a language skill. As demonstrated in the present study, the participants in the experimental group became fully focused on the listening tasks as the difficulty level increased. The obtained results in Table 4.12 also revealed that the participants paid attention to the keywords that were stressed.

Table 4.12: Learners' checklist after listening (Q11)

After Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I paid attention to keywords that were stressed.	10	90	40	60	80	20	80	20	100	-	100	-

The obtained results in this present study supported the findings by Oxford (1990) and Chang and Chang (2014), whereby learners effectively engage in reflecting their own learning abilities and making use of appropriate listening strategies. The study also claimed that it is beneficial for learners to develop metacognitive strategies for listening in order to enhance their ESL listening skills. Besides that, the obtained results of the current study also supported the findings of another study that was conducted in the Malaysian setting that demonstrated high level of awareness on metacognitive strategies for listening among the Malaysian students (Rahimirad and Zaree, 2015). As stated by Vandergrift (2002) and Goh (2000), certain metacognitive strategies such as mental translation and directed attention are often adopted when learners regularly translate what they hear. Accordingly, these strategies reflect problem-solving, knowledge-retrieval, and accompanying-verification (monitoring) processes, which were promptly explored in the present study.

4.2.3.3 Person knowledge strategy

The MALQ items 3, 8 and 15 for the person knowledge strategy were categorised based on the MALQ Scoring Scheme (refer to Appendix F). Table 4.13 presents the responses of the participants in the experimental group and control group on Item 3 (*I find that listening in English is more difficult than reading, speaking, or writing in English*) during the pre-experimental stage and post-experimental stage. Clearly, the participants in both groups mostly agreed that they use their prior knowledge of listening texts before the listening tasks, as shown in the number of participants who responded "strongly agree", "agree", and "partly agree". In particular, 33.3% of the participants in the experimental group strongly agreed to the statement during the pre-test, but the number of participants reduced to 16.7% during the post-test. However, the number of participants in the experimental group who responded "agree" slightly increased from 30.0% (pre-test) to

43.3% (post-test). Similarly, the number of participants in the control group who responded "agree" increased from 36.7% (pre-test) to 40.0% (post-test). On the other hand, the number of participants in the control group who responded "strongly agree" was similar for both pre-test and post-test (10.0%).

Table 4.13: Responses for Item 3

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	10.0	33.3	10.0	16.7
Agree	36.7	30.0	40.0	43.3
Partly agree	40.0	20.0	30.0	26.7
Slightly disagree	10.0	16.7	13.3	13.3
Disagree	3.3	-	3.3	-
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Table 4.14 presents the responses of the participants in the experimental group and control group on Item 8 (*I feel that listening comprehension in English is a challenge for me*) during the pre-experimental stage and post-experimental stage. Based on the tabulated data, it was evident that most of the participants in both groups agreed that they use their prior knowledge of listening texts before the listening tasks, as shown in the number of participants who responded "strongly agree", "agree", and "partly agree". The number of participants in the experimental group significantly decreased from 43.3% (pre-test) to 10.0% (post-test). Meanwhile, there was a slight increase in the number of participants in the same group who responded "agree", specifically from 30.0% (pre-test) to 46.7% (post-test). On the other hand, the number of participants in the control group who responded "strongly agree" slightly increased from 13.3% (pre-test) to 20.0% (post-test). Likewise, the number of participants in the control group who responded "agree" also increased from 36.7% (pre-test) to 46.7% (post-test).

Table 4.14: Responses for Item 8

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	13.3	43.3	20.0	10.0
Agree	36.7	30.0	46.7	46.7
Partly agree	30.0	23.3	26.7	26.7
Slightly disagree	13.3	3.3	3.3	13.3
Disagree	6.7	-	-	3.3
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Table 4.15 presents the responses of the participants in the experimental group and control group on Item 8 (*I do not feel nervous when I listen to English texts*) during the pre-experimental stage and post-experimental stage. Evidently, most of the participants agreed that they use their prior knowledge of listening texts before the listening tasks, as shown in the number of participants in both groups who responded "strongly agree", "agree", and "partly agree". In particular, the number of participants in the experimental group who responded "strongly agree" slightly increased from 20.0% (pre-test) to 26.7% (post-test). In the same group, the number of participants who responded "agree" decreased from 40.0% (pre-test) to 23.3% (post-test). However, the number of participants in the control group who responded "strongly agree" slightly increased from 6.7% (pre-test) to 13.3% (post-test). In the same group, the number of participants who responded "agree" increased from 30.0% (pre-test) to 33.3% (post-test).

Table 4.15: Responses for Item 15

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	6.7	20.0	13.3	26.7
Agree	30.0	40.0	33.3	23.3
Partly agree	50.0	16.7	36.7	40.0
Slightly disagree	3.3	20.0	-	10.0
Disagree	10.0	3.3	13.3	-
Strongly	-	-	3.3	-

disagree				
Total	100	100	100	100

Discussion

Referring to Table 4.16, the learners' checklist before listening for Q2, Q5, and Q7 further supported the above MALQ results. The circumstances of Q2 and Q5 occurred when the participants perceived that listening in English was more challenging than reading, speaking, or writing in English before they start listening. Similarly, the obtained results for Q7 further supported the obtained MALQ results when the participants were not nervous when they listened to the English texts before the listening tasks.

Table 4.16: Learners' checklist before listening (Q2, Q5, and Q7)

Before Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Q2: I have thought about the vocabulary of the topic of the text.	40	60	60	40	80	20	50	50	100	-	100	-
Q5: I have prepared myself to pay attention and to concentrate on what I will hear.	10	90	20	80	100	-	100	-	100	-	100	-
Q7: I have encouraged myself.	20	80	10	90	40	60	80	20	100	-	100	-

The present study provided vital evidence such as from table 4.15 proved listening skills as the most challenging skills to master compared to other language skills, such as speaking, reading, and writing skills. As stated by Vandergrift (2002), listening is an invisible mental process that is difficult to describe—listening requires the listeners to instantaneously (1) discriminate sounds, (2) understand the vocabulary used and grammatical structure, (3) interpret stress and intonation, and (4) retain and interpret these language aspects within the larger sociocultural context. The human brain does not only work through speaking or watching; it also registers listening as a process that focuses on

the audio as part of an integrative learning variable. On a similar note, Richards (2008) also proved the same theory and claimed that listening is connected syllabus to reinforce one's skill with other communication skills. The theory was combined with self-autonomy and tolerance for errors to build communication competence and present the opportunities to improve the accuracy and fluency of language. Both of these studies propelled the present study to explore how the learners would perform during the listening tasks. In particular, the listening tasks were assigned individually to the participants in this study where they were required to brainstorm on the content of the listening tasks within a limited timeframe.

The above MALQ results explicated important evidence on the challenges of acquiring listening skills (compared to other language skills, such as speaking, reading, and writing skills) among the participants. Most of the participants in both groups agreed that listening was rather challenging for them during the pre-test and post-test. For these participants, mastering listening skills was perceived as difficult despite being taught on the strategies to master the skills. The participants in the experimental group expressed nervousness even after they were treated with explicit metacognitive strategies. It was highly apparent that almost all the participants agreed on the difficulties to listen, which explained the nervousness among them during the listening tasks. In line with the findings of Morley (2001), listening skills can be a critical set of skills to learn compared to other language skills in the attempt of mastering a language. Besides that, the participants also agreed that listening was highly challenging due to their limited capability to listen efficiently, which supported the findings of Keshavaraz and Mobara (2003) on the need to acquire a certain level of capability to listen efficiently.

4.2.3.4 Mental translation strategy

The MALQ items 4, 11 and 18 for the mental translation strategy were categorised based on MALQ Scoring Scheme (refer to Appendix F). Table 4.17 presents the responses of the participants in the experimental group and control group on Item 4 (*I translate in my head as I listen*) during the pre-experimental stage and post-experimental stage. Clearly, the number of participants in both groups who responded "strongly agree" "agree", and "partly agree" revealed that the participants mostly agreed that they use their prior knowledge of listening texts before the listening tasks. In particular, the number of participants in the experimental group who responded "strongly agree" significantly increased from 16.7% (pre-test) to 30.0% (post-test). There was also an increase from 26.7% (pre-test) to 46.7% (post-test) among the participants in the experimental group who responded "agree". However, the responses from the control group were different. The number of those who responded "strongly agree" slightly decreased from 16.7% (pre-test) to 13.3% (post-test), while the number of those who responded "agree" during the pre-test and post-test remained constant at 40.0%.

Table 4.17: Responses for Item 4

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	16.7	16.7	13.3	30.0
Agree	40.0	26.7	40.0	46.7
Partly agree	36.7	53.3	33.3	20.0
Slightly disagree	6.7	3.3	10.0	3.3
Disagree	-	-	-	-
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Table 4.18 presents the responses of the participants in the experimental group and control group on Item 11 (*I translate keywords as I listen*) during the pre-experimental stage and post-experimental stage. Evidently, majority of participants agreed that they use

their prior knowledge of listening texts before the listening tasks based on the number of participants in both groups who responded “strongly agree”, “agree”, and “partly agree”. The number of participants in the experimental group who strongly agreed to the statement slightly decreased from 20.0% (pre-test) to 16.7% (post-test) and the number of those who responded “agree” also decreased from 33.3% (pre-test) to 36.7% (post-test). However, the responses from the control group revealed different results in this study. The number of participants who responded “strongly agree” significantly decreased from 13.3 % (pre-test) to 6.7% (post-test), while the number of those who responded “agree” slightly increased from 33.3% (pre-test) to 40.0% (post-test).

Table 4.18: Responses for Item 11

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	13.3	20.0	6.7	16.7
Agree	33.3	33.3	40.0	36.7
Partly agree	33.3	40.0	30.0	43.3
Slightly disagree	20.0	6.7	20.0	3.3
Disagree	-	-	-	-
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Table 4.19 presents the responses of the participants in the experimental group and control group on Item 18 (*I translate word by word as I listen*) during the pre-experimental stage and post-experimental stage. Evidently, most of the participants agreed that they use their prior knowledge of listening texts before the listening tasks, as shown in the number of participants in both groups who responded “strongly agree”, “agree”, and “partly agree”. In particular, the number of participants in the experimental group significantly increased from 10.0% (pre-test) to 30.0% (post-test). However, the number of participants in the experimental group who responded “agree” to the statement remained consistent at 36.7% in both pre-test and post-test. However, the participants in the control group who

responded “strongly agree” slightly increased from 10.0% (pre-test) to 13.3% (post-test), while the number of those who responded “agree” slightly increased from 30.0% (pre-test) to 36.7% (post-test).

Table 4.19: Responses for Item 18

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	10.0	10.0	13.3	30.0
Agree	30.0	36.7	36.7	36.7
Partly agree	50.0	40.0	36.7	30.0
Slightly disagree	6.7	10.0	10.0	3.3
Disagree	3.3	3.3	-	-
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Discussion

Referring to Table 4.20 and Table 4.21, the learners’ checklist before listening for Q5 and after listening for Q11 further supported the above MALQ results. The participants decided to translate word by word as they listened when they encountered difficulty in understanding the listening texts. These results were further supported by the learners’ checklist after listening for Q12 (Table 4.26) when the participants attempted to translate in mind as they listened.

Table 4.20: Learners’ checklist before listening (Q5)

Before Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I have prepared myself to pay attention and to concentrate on what I will hear.	10	90	20	80	100	-	100	-	100	-	100	-

Table 4.21: Learners' checklist after listening (Q11)

After Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I paid attention to keywords that were stressed.	10	90	40	60	80	20	80	20	100	-	100	-

Table 4.22: Learners' checklist after listening (Q12)

After Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I used my knowledge of the topic to help me guess the words I did not understand.	20	80	20	80	70	30	60	40	100	-	100	-

Among the considered metacognitive strategies in this study, mental translation strategy was mainly used, which increased from 37.30% (pre-test) to 57.33% (post-test), among the participants in the experimental group (Figure 4.1), which may be due to the increase in the level of awareness on metacognitive strategies in the listening aspect when the participants attempted to relate what they listened during their learning process to the audio that they were listening to. According to the MALQ scoring guide, a high score or higher percentage for the mental translation strategy reflects effortful processing through the first language that may interfere with attention to an overall processing of input. Furthermore, the participants in the experimental group agreed that they only translated keywords during the listening task, which was evident in the results of learners' checklist for Q11. This clearly shows that the mental translation strategy, especially the word-to-word translation, is used when learners listen to L2 texts. After the treatment of metacognitive strategies, the participants in the experimental group became more selective in their translation by only translating keywords to facilitate their comprehension of the aural texts. It was deemed plausible that at this point, interference may occur in the form of cognitive process that requires active translation from the first language. In other words,

the awareness on metacognitive strategies in listening potentially encourages the learners to be active mental translators of the information, specifically translating words from their first language in order to grasp the words in the second language.

The present study provided vital evidence such as from table 4.15 proved listening skills as the most challenging skills to master compared to other language skills, such as speaking, reading, and writing skills. As stated by Vandergrift (2002), listening is an invisible mental process that is difficult to describe—listening requires the listeners to instantaneously (1) discriminate sounds, (2) understand the vocabulary used and grammatical structure, (3) interpret stress and intonation, and (4) retain and interpret these language aspects within the larger sociocultural context. The human brain does not only work through speaking or watching; it also registers listening as a process that focuses on the audio as part of an integrative learning variable. On a similar note, Richards (2008) also proved the same theory and claimed that listening is connected syllabus to reinforce one's skill with other communication skills. The theory was combined with self-autonomy and tolerance for errors to build communication competence and present the opportunities to improve the accuracy and fluency of language. Both of these studies propelled the present study to explore how the learners would perform during the listening tasks. In particular, the listening tasks were assigned individually to the participants in this study where they were required to brainstorm on the content of the listening tasks within a limited timeframe.

Accordingly, the majority of participants in the experimental group agreed that they translated word by word for the listening tasks. In line with the findings of Peng Lan (2012), when ESL listeners go through the listening process, they are likely to relate the audio that they listen to their own understanding, which can either be in the language or context form. However, the findings of this study differed from the findings of Mohammad et al. (2016) where the use of mental translation to listen to the Jordanian literature among

the Jordanians was found low. This may be due to the background of the participants in the mentioned study that required less dependence on the mental translation strategy since they only required their first language. The participants in the present study were required to grasp the listening texts in a second language (English language).

According to the scoring guide of MALQ (refer to appendix F), a high score (or in percentage) for mental translation strategy reflects effortful processing in the first language. In other words, this may interfere with the overall attention and input processing in the form of cognitive process that requires active translation in the first language. The increased awareness on the use of metacognitive strategies to improve listening skills among the participants prompted them to be active mental translator of the information provided. In order to comprehend the words in the second language, the participants had to translate these words from their first language.

Hence, the use of mental translation was deemed more relevant among ESL learners in acquiring a second language considering that most of the participants in this study preferred to translate and connect the information they heard to their understanding. This can be concluded as a motivating factor for ESL learners to enhance their listening skills for the IELTS listening component.

4.2.3.5 Problem-solving strategy

The MALQ items 5, 7, 9, 13, 17 and 19 for the problem-solving strategy were categorised based on MALQ Scoring Scheme (refer to Appendix F). Table 4.23 presents the responses of the participants in the experimental group and control group on Item 5 (*I use the words that I understand to guess the meaning of the words that I do not understand*) during the pre-experimental stage and post-experimental stage. Evidently, most of the participants in this study agreed that they use their prior knowledge of listening texts before the listening tasks, as shown in the number of participants in both groups who

responded “strongly agree”, “agree”, and “partly agree”. In particular, the number of participants in the experimental group who responded “strongly agree” slightly decreased from 16.7% (pre-test) to 10.0% (post-test). Similarly, the number of participants in the experimental group who responded “agree” also decreased from 50.0% (pre-test) to 30.0% (post-test). As for the control group, the number of participants who responded “strongly agree” significantly decreased from 20.0% (pre-test) to 3.3% (post-test). On the contrary, the number of participants who responded “agree” slightly increased from 40.0% (pre-test) to 43.3% (post-test).

Table 4.23: Responses for Item 5

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	20.0	16.7	3.3	10.0
Agree	40.0	50.0	43.3	30.0
Partly agree	36.7	23.3	40.0	13.3
Slightly disagree	3.3	6.7	10.0	26.7
Disagree	-	3.3	-	20.0
Strongly disagree	-	-	-	-
Total	100	100	100	100

Table 4.24 presents the responses of the participants in the experimental group and control group on Item 7 (*As I listen, I compare what I understand with what I know about the topic*) during the pre-experimental stage and post-experimental stage. The obtained results depicted a significant pattern—the majority of participants agreed that they use their prior knowledge of listening texts before the listening tasks, as shown in the number of participants in both groups who responded “strongly agree”, “agree”, and “partly agree”. In particular, the number of participants in the experimental group who responded “strongly agree” remained consistent at 20.0% for both pre-test and post-test. Meanwhile, the number of participants in the experimental group decreased from 46.7% (pre-test) to 33.3% (post-test). However, the number of participants in the control group who strongly

agreed to the statement slightly decreased from 10.0% (pre-test) to 6.7% (post-test). On the contrary, the number of participants in the control group who responded "agree" increased from 40.0% (pre-test) to 53.3% (post-test).

Table 4.24: Responses for Item 7

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	10.0	20.0	6.7	20.0
Agree	40.0	46.7	53.3	33.3
Partly agree	36.7	23.3	20.0	36.7
Slightly disagree	10.0	6.7	16.7	6.7
Disagree	3.3	3.3	-	3.3
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Table 4.25 presents the responses of the participants in the experimental group and control group on Item 9 (*I use my experience and knowledge to help me understand*) during the pre-experimental stage and post-experimental stage. The obtained results on the number of participants who responded "strongly agree", "agree", and "partly agree" revealed a significant pattern where the majority of participants agreed that they use their prior knowledge of listening texts before the listening tasks. In particular, the number of participants in the experimental group who responded "strongly agree" significantly reduced from 43.3% (pre-test) to 16.7% (pre-test) whereas the number of participants in the experimental group who responded "agree" significantly increased from 33.3% (pre-test) to 53.3% (post-test). On the other hand, the number of participants in the control group who responded "strongly agree" significantly increased from 16.7% (pre-test) to 36.7% (post-test) but the number of those who responded "agree" decreased from 40.0% (pre-test) to 23.3% (post-test).

Table 4.25: Responses for Item 9

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	16.7	43.3	36.7	16.7
Agree	40.0	33.3	23.3	53.3
Partly agree	30.0	23.3	33.3	26.7
Slightly disagree	6.7	-	3.3	3.3
Disagree	6.7	-	-	-
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Table 4.26 presents the responses of the participants in the experimental group and control group on Item 13 (*As I listen, I quickly adjust my interpretation if I realise that is not correct*) during the pre-experimental stage and post-experimental stage. The obtained results depicted a significant pattern—the majority of participants agreed that they use their prior knowledge of listening texts before the listening tasks. As shown in the following table, most of the participants in both groups responded "strongly agree", "agree", and "partly agree" to the statement. Besides that, the number of participants in the experimental group who responded "strongly agree" slightly increased from 10.0% (pre-test) to 16.7% (post-test). However, the number of participants in the experimental group who responded "agree" decreased by 10.0% from 46.7% (pre-test) to 36.7% (post-test). On the contrary, as for the control group, the number of participants who responded "strongly agree" decreased from 13.3% (pre-test) to 10.0% (post-test) whereas the number of participants who responded "agree" increased from 26.7% (pre-test) to 36.7% (post-test).

Table 4.26: Responses for Item 13

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	13.3	10.0	10.0	16.7
Agree	26.7	46.7	36.7	36.7
Partly agree	46.7	26.7	40.0	10.0
Slightly disagree	13.3	16.7	10.0	10.0

Disagree	-	-	-	6.7
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Table 4.27 presents the responses of the participants in the experimental group and control group on Item 17 (*I use the general idea of the text to help me guess the meaning of words that I do not understand*) during the pre-experimental stage and post-experimental stage. A large proportion of the participants agreed that they use their prior knowledge of listening texts before the listening tasks, as shown by the number of participants in both groups who responded "strongly agree", "agree", and "partly agree". In particular, the number of participants in the experimental group who strongly agreed to the statement slightly increased from 20.0% (pre-test) to 23.3% (post-test). However, the number of participants in the experimental group remained consistent at 46.7% for both pre-test and post-test. On the other hand, the number of participants in the control group who responded "strongly agree" slightly increased from 6.7% (pre-test) to 10.0% (post-test) whereas the number of participants who responded "agree" significantly increased from 26.7% (pre-test) to 43.3% (post-test).

Table 4.27: Responses for Item 17

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	6.7	20.0	10.0	23.3
Agree	26.7	46.7	43.3	46.7
Partly agree	56.7	23.3	16.7	16.7
Slightly disagree	10.0	6.7	26.7	6.7
Disagree	6.7	3.3	-	6.7
Strongly disagree	-	-	3.3	-
TOTAL	100	100	100	100

Table 4.28 presents the responses of the participants in the experimental group and control group on Item 19 (*When I guess the meaning, I recall everything else that I have*

heard, to see if my guess makes sense) during the pre-experimental stage and post-experimental stage. The majority of participants agreed that they use their prior knowledge of listening texts before the listening tasks, as shown by the number of participants in both groups who responded "strongly agree", "agree", and "partly agree". In particular, the number of participants in the experimental group who responded "strongly agree" slightly increased from 16.7% (pre-test) to 26.7% (post-test) but the number of participants in the same group who responded "agree" decreased by 3.3% from 40.0% (pre-test) to 36.7% (post-test). However, the number of participants in the control group who responded "strongly agree" remained constant at 10.0% for both pre-test and post-test whereas the number of those who responded "agree" significantly increased from 26.7% (pre-test) to 43.3% (post-test).

Table 4.28: Responses for Item 19

Response	Pre-experimental Stage		Post-experimental Stage	
	Control group (%)	Experimental group (%)	Control group (%)	Experimental group (%)
Strongly agree	10.0	16.7	10.0	26.7
Agree	26.7	40.0	43.3	36.7
Partly agree	46.7	33.3	33.3	20.0
Slightly disagree	13.3	6.7	6.7	10.0
Disagree	3.3	3.3	3.3	6.7
Strongly disagree	-	-	3.3	-
Total	100	100	100	100

Discussion

Referring to Table 4.29, the obtained results reaffirmed that, before listening, the participants opted to listen and compare what they hear with their knowledge, understanding, and experience about the topic or the general idea of the listening text (to guess the meaning of the words they hear) if they encounter difficulty to understand the listening texts. In addition, the following results in Table 4.35 further reaffirmed the use of prior knowledge of the topic to guess unfamiliar words among the participants.

Table 4.29: Learners' checklist before listening (Q1, Q3, and Q5)

Before Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Q1: I understand what I have to do after listening and I have asked the teacher for clarifications as required.	40	60	100	-	80	20	90	10	100	-	100	-
Q3: I have thought about my knowledge about the topic of the text.	70	30	70	30	100	-	90	10	100	-	100	-
Q5: I have prepared myself to pay attention and to concentrate on what I will hear.	10	90	20	80	100	-	100	-	100	-	100	-

Table 4.30: Learners' checklist after listening (Q12)

After Listening	Lesson 1 (%)		Lesson 2 (%)		Lesson 3 (%)		Lesson 4 (%)		Lesson 5 (%)		Lesson 6 (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
I used my knowledge of the topic to help me guess the words I did not understand.	20	80	20	80	70	30	60	40	100	-	100	-

Basically, metacognitive strategies are used to monitor one's thinking and learning. Therefore, learners must have the ability to monitor their performance in terms of their strengths and weaknesses prior to listening and during the listening task. Overall, the participants in this study used words that they know to guess difficult or unfamiliar words to understand the overall listening text. They also made use of their knowledge and experience about the topic to guess the meaning of the words and recalled any prior listening texts that they heard to evaluate whether their guesses make sense.

The participants in the experimental group displayed a slight increase in using and adjusting their interpretation after they received treatment of explicit instruction in using metacognitive strategies, specifically problem-solving strategy, for listening comprehension. These results supported the claim by Cubukcu (2008), whereby metacognitive strategies may challenge learners in handling and regulating the information that they obtain in order to master a particular language skill. The obtained results of the present study also supported the claim by Mayer and Wittrock (1996) and Walczyk (2000), whereby when learners do have problems to understand and reflect the learning process, they may eventually neglect the process. In the present study, the participants in the experimental group demonstrated lower awareness in using problem-solving strategy. They may have given more focus on other processes of using metacognitive strategies to acquire IELTS listening skills.

4.3 IELTS Listening Test Scores and the learners' exercises scores

With respect to the second objective of this study, the following research question (RQ2) was addressed. Based on the following results of listening test scores, this study determined whether the use of metacognitive strategies influences the IELTS listening test scores of the participants (the experimental group versus the control group).

RQ2: How do the IELTS listening test scores of the participants in the experimental group differ from the IELTS listening test scores of the participants in the control group?

4.3.1 Paired sample t-test for learners' exercise scores

Accordingly, Table 4.31 presents the mean scores of pre-test and post-test for both experimental group and control group. In particular, the mean score of experimental group increased from 59.40 (pre-test) to 74.12 (post-test). On the other hand, the mean score of control group only increased slightly from 54.48 (pre-test) to 59.04 (post-test). The paired

sample t-test was conducted to determine if the intervention of metacognitive strategies influences the listening test scores of the participants. Referring to Table 4.32, the difference between the mean scores of pre-test and post-test for the experimental group (by 14.72) was statistically significant ($M_{post\text{-}test}$ = 74.12, *SD* = 8.81, *t* (24) = -8.354, $p < .05$) at 0.05 level with an interval between 18.35 and 11.08. The recorded eta-squared statistic (0.74) indicated large effect size. As for the control group, the difference between the mean scores of pre-test and post-test was not significant with a slight difference of 4.56 ($M_{post\text{-}test}$ = 59.04, *SD* = 3.92, *t* (24) = -3.20, $p > .05$).

Table 4.31: Mean scores of pre-test and post-test for experimental group and control group

		Mean	N	Std. Deviation	Std. Error Mean
Experimental group	Pre-test	59.4000	75	12.33559	2.46712
	Post-test	74.1200	75	10.13377	2.02675
Control group	Pre-test	54.4800	75	8.88407	1.77681
	Post-test	59.0400	75	8.27385	1.65477

Table 4.32: Results of paired sample t-test for experimental group and control group

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Experimental group	-14.72	8.81	1.76212	-18.35684	-11.08316	-8.354	74	.000
Control group	-4.56000	3.29242	.65848	-5.91904	-3.20096	-6.925	74	.010

4.3.2 One-way ANOVA with repeated measures for learners' exercise scores

Meanwhile, one-way ANOVA with repeated measures was conducted to evaluate the effect of metacognitive strategies during the intervention stage, specifically from Lesson 1 to Lesson 6, in terms of the listening test scores (based on the learners' exercise). The obtained results were expected to support the obtained main results of pre-test and post-test for the IELTS listening test scores. Referring to the following Table 4.32 the

average score for Lesson 1 was 4.06 (*SD* = 0.70), which steadily increased to the average score of 8.01 (*SD* = 0.78) for Lesson 6. The differences in the mean scores were statistically significant, which proved the significant effect of metacognitive strategies on the listening test scores (Wilks' Lambda = .012, F (5, 70) = 1165, p = .000). In addition, the result of Mauchly's test of sphericity was statistically significant (p < .001); hence, the assumption of sphericity was not met. Referring to Greenhouse-Geisser correction, the results of one-way ANOVA with repeated measures reaffirmed that the mean scores of learners' exercise from Lesson 1 to Lesson 6 significantly differed (F(3.399, 251.521) = 276.406, p < .001).

Table 4.33: Results of one-way ANOVA with repeated measures

Scores from the learners' exercise	Mean	Std. Deviation	N
Lesson 1	4.0667	.70391	75
Lesson 2	4.6267	1.02368	75
Lesson 3	4.9867	.76217	75
Lesson 4	5.4133	.80695	75
Lesson 5	6.2267	.96665	75
Lesson 6	8.0133	.77970	75

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[c]
Scores from the learners' exercise	Pillai's Trace	.988	1164.639[b]	5.000	70.000	.000	.988	5823.195	1.000
	Wilks' Lambda	.012	1164.639[b]	5.000	70.000	.000	.988	5823.195	1.000
	Hotelling's Trace	83.188	1164.639[b]	5.000	70.000	.000	.988	5823.195	1.000
	Roy's Largest Root	83.188	1164.639[b]	5.000	70.000	.000	.988	5823.195	1.000

Mauchly's Test of Sphericity[a]							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Scores from the learners' exercise	.114	156.611	14	.000	.680	.716	.200

Tests of Within-Subjects Effects								
Source		**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**	**Noncent. Parameter**
Scores from the learners' exercise	Sphericity Assumed	743.591	5	148.718	276.406	.000	.789	1382.032
	Greenhouse-Geisser	743.591	3.399	218.772	276.406	.000	.789	939.487
	Huynh-Feldt	743.591	3.582	207.569	276.406	.000	.789	990.193
	Lower-bound	743.591	1.000	743.591	276.406	.000	.789	276.406
Error (Scores)	Sphericity Assumed	199.076	370	.538				
	Greenhouse-Geisser	199.076	251.521	.791				
	Huynh-Feldt	199.076	265.096	.751				
	Lower-bound	199.076	74.000	2.690				

Discussion

As previously indicated, this study analysed the results of learners' exercise scores between the experimental group and control group using paired sample t-test and one-way ANOVA with repeated measures. The mean differences of the obtained scores from Lesson 1 to Lesson 6, which were conducted on a weekly basis, were evaluated in this study. The approach of incorporating weekly scores (Lesson 1 to Lesson 6) was deemed as the first with the purpose of determining whether the performance of participants improves.

Accordingly, the obtained results of paired sample t-test indicated that the listening scores of the participants significantly increased following the intervention. This may be due to the positive impact of the intervention used. In line with the findings of Anderson (2003), the performance of learners can be improved when they are explicitly taught on how to apply specific strategies to acquire listening skills compared to those who are not exposed to such strategies. Furthermore, Goh (2006) also highlighted that explicit instruction of metacognitive strategies would motivate ESL learners to acquire listening

skills and assist them to improvise their listening performance. Therefore, it is highly imperative that learners are exposed to metacognitive strategies in order to improve their listening performance. After all, the test scores play an important motivating factor in any learning strategy, as learners are motivated to improve themselves to achieve better scores.

Although Sumarsih (2017) found that the learners' listening skills did improve after they were explicitly taught on how to use the metacognitive strategies, this prior study focused on the scores during the pre-test, intervention, and post-test. Therefore, the validity of the findings was questionable, which explained the focus of this study to examine the scores from the pre-test, post-test, and weekly scores during the intervention stage. Hence, in order to support the above main results of this study, one-way ANOVA with repeated measures was conducted, which revealed that the average score across six lessons increased from 4.06 (*SD* = 0.70) to 8.01 (*SD* = 0.78). The effect of metacognitive strategies on the learners' exercise scores was found statistically significant, which clearly demonstrated the importance of recording the test scores during the teaching and learning process to ensure effective implementation of intervention for the learners. Based on the obtained results of the experimental group, this study proved the effectiveness of following the explicit instruction using the metacognitive strategies on a repeated practice among ESL learners. In line with the findings of Shimamura (2000) and Niemi (2002), learners are able to perform well in the given tasks when they are exposed to the use of metacognitive strategies on a repetitive practise.

4.4 The Interview and the learner's discussion

With respect to the third objective of this study, the following research question (RQ3) was addressed using a semi-structured interview approach, which involved 10 selected participants. It should be noted that general strategic behaviours at varying

degrees were highlighted and reported from the perspectives of the participants in the groups.

RQ3: What do the participants think about the use of metacognitive strategies in the IELTS listening preparatory course?

Accordingly, each participant was given an individual code (please refer to table Table 3.4). The recorded interview responses were analysed using the thematic coding approach. The following Table 4.34 provides the identified themes, which are discussed in the following subsections. In order to support the identification of the emerging themes, the excerpts from the learners' discussion were extracted. The obtained results served to triangulate the acquired results of post-experimental stage (post-test) and intervention.

The excerpts from the interviews were cited as the following example:

(T1, LA3), T1 refers to Transcription 1 and LA3 is an example of a code name given to the participants.

While the excerpts from the learners' group discussions were cited as the following example:

(T4, LC 1, GLC), T4 refers to transcription 4, LC1 is an example of a code name given to the participant and GLC is the name of the of the group discussion the participant belongs to.

Table 4.34: Results of thematic coding

Interview questions	Anchors	Themes
1. What do you think about using metacognitive strategies in IELTS listening course?	Metacognitive strategies	Improved listening skills 1. A new learning strategy for listening 2. Listening became easier 3. Unique way to focus on listening 4. Student-centred approach
2. How do you start planning when listening? 3. How do you do monitoring after you completed the planning stage? 4. How do you do evaluation when you completed the	Experience of using metacognitive strategies	1. Planning a. Predict b. Prepare 2. Monitoring a. Discuss with friends 3. Evaluating a. Analyse the questions and

Interview questions	Anchors	Themes
monitoring stage? 5. How do you do problem-solving as the final stage of learning listening skills?		compare the scores b. Looking into the scores 4. Problem-solving a. Reflection
6. Do you follow or skip the stages in metacognitive strategies? Why?	Sequence of strategies	To improve the results and to be aware of the consequences of avoiding the sequence
7. What are the advantages of using the metacognitive strategies in listening?	Advantages of using metacognitive strategies	1. Improve listening skills 2. Promote independent learning
8. What are the disadvantages of using the metacognitive strategies in listening?	Disadvantages of using metacognitive strategies	1. Have to work fast 2. Need time to master the strategies
9. Does using metacognitive strategies help you to handle your problems efficiently when listening? Why?	Learning aid	1. Develop more confidence 2. Understand the audio played
10. Do you have any suggestions or comments that you would like to share about listening using the metacognitive strategies?	Suggestions and comments	1. Should be introduced in schools 2. Should provide more guidance

4.4.1 Improved listening skills

The first emerging theme was related to the effectiveness of using metacognitive strategies in terms of improved listening skills among the participants. A semi-structured question was put forward during the interview session to ascertain the perception of participants on the use of metacognitive strategies in IELTS listening preparatory course. Four sub-themes were identified for this identified theme, which are discussed in the following:

a) ***A new learning strategy for listening***

The first identified sub-theme was related to the use of metacognitive strategies in teaching listening skills, which was identified as a new learning strategy for listening. Some of the participants identified the use of metacognitive strategies as "*something new*" and "*very interesting*" since they were able to "*learn listening skill*" using these newly

introduced listening strategies. Some of the responses indicated the use of such teaching approach as a new way of teaching listening skills. Evidently, the participants were generally supportive of using metacognitive strategies for listening in the classroom:

> *It is something new to me, and I find it very interesting because I am able to learn listening skill when I use these strategies.*
> (T1, LA3)
> *This is the first time I came across a way to learn listening.*
> (T1, LB1)

Discussion

Clearly, the use of metacognitive strategies was deemed as a new concept of learning for the participants. They also viewed these strategies positively where the use of metacognitive strategies motivated their interest to learn, engaged them to experience improved learning approach, and allowed them to understand the audio with ease. As Flavell (1979) highlighted, with respect to the metacognition theory, metacognitive strategies allow learners to do "thinking about thinking" in their learning process, which explains the above responses of the participants. The present study demonstrated the use of metacognitive strategies as a motivating factor for learners to acquire learning skills, which supported the claim made by Gourden (2007). Besides that, the findings of this study also supported the findings of Mendelsohn (2001), whereby learners are interested to incorporate new strategies into their learning process when they are exposed to new learning strategies, such as metacognitive strategies. Adding to that, in line with the claim that was postulated by Vandergrift (2007), numerous ESL learners do find metacognitive strategies as new means of acquiring listening skills since these strategies are exposed or taught in a very limited manner to the learners.

b) ***Listening became easier***

Meanwhile, the second sub-theme supported the use of metacognitive strategies in teaching listening skills, which made listening easier:

> *It makes me to learn listening skill in much an easier way because before this I just listen and answer without making any understanding when I learn listening skill.*
> (T1, LA2)

> *I find this strategy is much a better way to learn listening for English for IELTS because I can learn on my own.*
> (T1, LC4)

Discussion

Overall, the participants found that using metacognitive strategies benefits them in their learning process and allows them to learn on their own. According to the participants, the learning process to acquire listening skills became easier after they were exposed to these new listening techniques. The participants further revealed that their listening acquisition can be less complex if they were able to grasp what they listen. The use of metacognitive strategies was found to be effective in enhancing listening skills among the participants as these strategies were deemed effective in making them listen and understand the listening tasks. Accordingly, explicit metacognitive strategies do ease the overall learning process for ESL learners to acquire listening skills for IELTS. After all, the IELTS listening texts involve audios in native English with a certain accent, which can be challenging for most of the ESL learners to grasp (Rivers, 1981; Vandergrift, 2007; Abbas and Mohammad Reza, 2011). Hence, in order to overcome these challenges, there is a crucial need for ESL learners to master these strategies to improvise their listening skills

(Abbas and Mohammad Reza, 2011). The present study proved that the use of the semetacognitive strategies can accommodate the learning needs of learners.

c**)** ***Unique way to focus on listening***

The third sub-theme was the unique way to focus on listening where one of the participants was initially not interested to learn about listening skills but after learning about different learning strategies during the intervention, the participant developed unique interest to acquire listening skills through metacognitive strategies:

> *It created a unique interest in me to learn listening skill because before this I was not interested to learn this skill because I don't know how to learn it but now I feel much better when I want to learn listening.*
> (T1, LC1)

Discussion

The above response demonstrated that learners are able to adapt to the new or unfamiliar learning strategies in order to improve their learning process, which fully supported the claim that was postulated by Flavell (1992) on the adaptability of learners to adapt metacognitive strategies in the learning process and the influence of how one perceives the strategies used to acquire a skill on the learning process.

d) ***Student-centred approach***

The fourth sub-theme highlighted the use of metacognitive strategies in teaching listening skill as a student-centred approach or in other words, these strategies allow learners to become active and independent L2 learners. The following excerpts clearly reflect the identified sub-theme:

> *I find this method is more towards student-centred learning.*
> (T1, LB3)

I think I was unknowingly using these strategies before this when learning listening skill at a language centre but I understand it better now how to apply them when learning listening for English for IELTS. (T1, LC2)

Discussion

The obtained responses indicated that the newly proposed methods of teaching listening skills highly focus on the learners' learning process of listening. Learners are placed at the centre of the learning process. The participants also considered that metacognitive strategies allow them to depend on their abilities to learn listening skills. Overall, the use of metacognitive strategies was proved effective for learners to acquire listening skills while allowing them to develop their own listening skills independently. As Flavell (1992) and Vandergrift (2007) claimed, metacognitive strategies can be operated consciously or unconsciously during the learning process to acquire skills; thus, justifying the responses of certain participants in the present study who did not realise that they had applied these strategies in their learning process. Following the intervention that provided explicit instructions on how to apply metacognitive strategies, the participants revealed an improved understanding of the use of these strategies for listening. In line with the findings of Goh (2008), learners would realise that the use of metacognitive strategies is a student-centred approach after they are provided with explicit instructions on how to apply metacognitive strategies. Hence, it was deemed vital that learners are properly informed on metacognitive strategies in order to train them to be independent learners.

4.4.2 Experience of using metacognitive strategies

The second identified theme was related to the particular use of metacognitive strategies, specifically planning, monitoring, evaluating, and problem-solving. The obtained responses of the semi-structured interview reflected the perception of participants

on the use of metacognitive strategies. Each identified sub-theme was supported by the excerpts of learners' discussion during the intervention stage. It was deemed important to examine how the participants applied metacognitive strategies during the intervention stage and post-experimental stage in order to evaluate the outcomes of intervention.

a) ***Planning***

As for the "planning" strategy, the obtained responses were provided in terms of predicting and preparing for the listening tasks.

i) *Predicting*

The participants indicated that they referred to the questions to predict the type of audio to be played:

> *I will start predicting on what type of audio will be played by looking at the questions.*
> (T1, LA1)
> *For this exercise, I will look at the questions in this section A and I will predict on what I am about to listen. Like this one it will be a conversation.*
> (T1, LA2)
> *Normally before the audio is being played I will be given time to go through the questions and by looking at the questions I will be able to predict on what I am going to listen for example here is a conversation.*
> (T1, LB3)
> *I firstly look at the questions and analyse them on what I am going to listen, like here it is a conversation audio. Therefore, it makes me feel prepared to listen to an audio before it is played.*
> (T1, LC3)

The above findings were reaffirmed based on the outcomes of the learners' discussion during the intervention stage. The excerpts of their discussion clearly revealed that the participants read the questions in the planning stage:

> *I went through today's questions first before the audio was played. I could actually predict some of the answers before the audio started.*
> (T3, LB 2, GLB)
> *I was trying to read aloud in my mind all the questions before the audio was played. I found that it is easier to understand the questions and get the answers.*
> (T4, LA 3, GLA)

Discussion

It was found that the participants were able to predict the answers when they applied the planning strategy. The practice of reading the questions during the planning stage helped them to predict the answers and assisted in their understanding of the questions. Most importantly, understanding the listening questions, compared to predicting the correct answers, is the main learning objective for ESL learners. During the planning stage, one of the key listening skills includes predicting, especially the vocabulary or words used in the questions or answers of the listening tasks (Goh, 2008), which was clearly demonstrated among the participants in this study. Besides that, the participants of this study were also clearly focused on the word-to-word understanding of the listening tasks as well as the content of the questions to answer the questions (Goh, 2008). Basically, the participants focused on anticipating the given task by analysing the given task. In line with the findings of Anderson (2003), the participants anticipated and analysed the given listening tasks using the metacognitive strategies, which helped them to gain improved understanding of the requirements of the tasks.

ii) *Preparing*

Apart from predicting, the participants also revealed that they were prepared before any audio was played during the planning stage:

> *It's like setting my thoughts and mind on what I am about to listen like here it will be a conversation and it makes my listening process to the audio much better.*
> (T1, LB2)
> *Before the teacher play the audio, I will plan by looking at the questions for this section and then start thinking of the possible answers.*
> (T1, LB3)
> *Before the audio is played I will go through the questions quickly in order to know what I am about to listen for example here it is a conversation.*
> (T1, LC1)
> *I start reading the questions here and then I will plan on what I am about to listen like here it is a conversation, so it is more like a head start for me.*
> (T1, LC3)
> *I go through all the questions in the first section to know what type of audio will be played like here it is a conversation. So in my mind I will set myself that I am prepared to hear the audio which is going to be played.*
> (T1, LC4)

The above findings were reaffirmed based on the outcomes of the learners' discussion during the intervention stage. The excerpts of their discussion clearly revealed that the participants expressed confidence and were prepared before listening:

I look through the questions and found keywords which made me understand that I am going to listen the conversation on … This actually made me feel more prepared and mind was focused.
(T4, LC 1, GLC)

Today's questions were more on directions, before I listen I see the landmarks in the map given and was looking at the blanks which needed to be filled in. I feel very prepared and confident that I can notice what I am about to do.
(T6, LA3, GLA)

Discussion

As revealed, the participants were able to set their mind to focus on the listening texts and to set goals on the next course of action according to the requirements of the listening questions. The participants who were explicitly taught how to apply metacognitive strategies were able to prepare themselves by setting specific goals on what to be expected before listening, which reaffirmed the recommendation by Goh (2006). With that, adequate preparation potentially increases the ESL learners' confidence, especially when they have to deal with the challenges of understanding the accent and speech rate during the listening tasks. As claimed by Kurita (2012), metacognitive strategies allow learners to reduce their level of anxiety when they learn to acquire listening skills. Furthermore, learners who are prepared before the listening tasks are able to activate the appropriate listening processes (Vandergrift, 2002), such as predicting and preparing what they are about to listen and decide on the required attention for the given listening tasks.

b) ***Monitoring***

i) *Discuss with friends*

Most of the participants revealed their preference to monitor via peer feedback. In particular, they evaluated and discussed their answers among one another and attempted to get their friends' explanation on the correct or wrong answers provided:

> *I will check and discuss the answers for the completed section and I normally discuss with my friends… either I or my friends will discuss the answers we have done for one section and compare our answers but sometimes I will just monitor on my own.*
> (T1, LA1)
> *I will discuss with my friends and we compare our answers for a section and then we try explain to each other.*
> (T1, LA2)
> *I will discuss with my friends the answers and get their feedback on the wrong answer and the reason for it is wrong.*
> (T1, LB2)

The above findings were reaffirmed based on the outcomes of the learners' discussion during the intervention stage. The excerpts of their discussion clearly revealed that the participants preferred discussing with their friends to understand why their answers were incorrect:

> *I compared my answers with Jacy. I find it that I am able to understand the reason for my answer was wrong. She explained to me that reading the instructions also very important.*
> (T4, LB2, GLB)
> *Sze Chen asked me why her answers were wrong and me too will ask her. But today we asked another friend, Jaden and he told us that for talks need to focus on the blanks and the sentences before it.*

(T6, LA2, GLA)

Discussion

The participants revealed that they were more comfortable to discuss with their friends on the mistakes made during the listening practices. Furthermore, they were able to justify and understand the choice of answers better when they discussed with their peers. Through peer feedback, the participants were able to critically comment on their work. In other words, they were willing to accept criticisms and ideas from their peers. The above responses were in line with the recommendation by Goh (2006) where ESL learners are prudent in verifying the completed tasks with their peers during the monitoring stage, especially in checking and correcting their completed listening tasks, which subsequently improve their understanding to acquire listening skills using metacognitive strategies. The participants demonstrated their focus to ensure that they were on the right track and improvise accordingly when they did not perform well in specific sections of the listening tasks. Having the discussion with their friends allows learners to monitor their learning progress for the particular tasks and improvise their skills using metacognitive strategies (Marrapodi, 2006), which was clearly demonstrated among the participants in the current study.

c) ***Evaluation***

i) *Analysing the questions and comparing the scores*

Most of the participants performed evaluation for improvement by analysing the questions and sections following the intervention. They also indicated that they evaluated the questions and analysed parts that they did not perform well in order to improve themselves:

I will analyse all the questions for all the sections and see why I get wrong… I will check the scores and compare with previous ones… I will evaluate on how well I have done for a particular test and then keep track on sections which I have not done well.

(T1, LB2)

I will look at the errors I have done in the section, and try to understand the reason for my answer is wrong. I will see the whole exercises or tests I have done and compare my scores with the previous ones.

(T1, LA2)

The above findings were reaffirmed based on the outcomes of the learners' discussion during the intervention stage. The excerpts of their discussion clearly revealed that the participants were able to identify and compare their mistakes to the prior exercises:

I see today's questions I have problem in the spellings. That's why I get many mistakes and compared to my previous scores this one is lower today. After I see the number of mistakes I must compare with my previous exercises.

(T5, LB3, GLB)

I think today's exercise is the easiest one for me. I am able to score well today compared to the previous exercises. I think talk is easier for me and directions are difficult for me to score well.

(T6, LC4, GLC)

Additionally, some of the participants referred to their scores and reflected to improve themselves using the process of metacognitive strategies that they learned:

I will look at all the questions and see which part I didn't do good so that I can improve that part.

(T1, LC1)

I normally look back at all the forty questions on how well I have done… A few times, I tried skipping one of the strategies but it did not work for me because at end I found out I have to follow it like a cycle then I am able to do well on my own.

(T1, LC3)

I will look into how well I have done on all the sections and try to improve on the sections that I have not done well… At first few test exercises I didn't do well but when I started focusing on this strategy I started improving my results because I can know how good I did in each section.

(T1, LC4)

During the intervention stage, the following participants highlighted that they kept track of their scores to compare the obtained their scores with the obtained scores of prior exercises:

After completing today's exercise, I first looked at my score which was 6/10. Previous exercise I got 4/10, I can see improvement in my work.

(T4, LB1, GLB)

I see my score today was the same as last week 7/10. But I find my scores have been improving a lot… During the first two exercises I scored 4/10.

(T6, LA3, GLA)

Discussion

Evidently, the participants demonstrated the ability to identify the errors made after the completion of the exercises. They were able to understand the reasons for their scores and they were determined to compare their current progress with the prior exercises, which proved their motivation to identify errors for improvement. In this case, explicit instruction of metacognitive strategies benefits ESL learners by allowing them to improve themselves

based on the scores obtained (Lovett, 2008), which was evident among the participants in the current study. In line with the recommendation by Goh (2006), ESL learners evaluate their performance and compare their current and prior work, particularly on the mistakes they make during the evaluation for listening tasks. The participants in the current study expressed their concern on the scores they obtained and focused on the errors they made in order to improve their results. They demonstrated appropriate understanding and evaluation by comparing their results. With that, the participants were able to practise on the areas they were weak at. These observations were aligned with the claim that was postulated by Flavell (1979), whereby learners who emphasise metacognitive strategies in their learning process are able to evaluate their performance to improve their language skills and revise their learning strategies by focusing on the areas that require improvement.

d) ***Problem-solving***

i) *Reflecting*

Apart from that, the participants demonstrated their ability to reflect when they applied problem-solving strategy during their learning process:

> *It is more like a reflect kind of thing for me to see which part I have done well in the process of using the strategy.*
> (T1, LA1)
> *I feel this part, it is very important because here I will look into the whole process of listening skill I have learned for a particular exercise or test.*
> (T1, LA3)
> *It allows me to understand by giving me to think the reason why I didn't do well for a test. I normally will write down simple notes on each section so that I can reflect it and improve myself.*
> (T1, LB1)

The above findings were reaffirmed based on the outcomes of the learners' discussion during the intervention stage. The excerpts of their discussion clearly revealed that the participants analysed the strategies that they applied during the problem-solving stage:

> *I analysed on the questions by thinking back on the way I applied the planning and monitoring strategy for today's exercise. I think I need to focus more on my planning stage.*
> (T5, LB3, GLB)

> *I took down notes for today and my previous exercise to see whether what area I need to improve or no need to improve. I always see the whole process whether I did all of them correctly.*
> (T6, LC2, GLC)

Discussion

Accordingly, the participants were able to apply problem-solving strategy in the process of listening acquisition. Certain participants resorted to employing the note-taking technique to compare the steps they applied during the listening process. The above responses were in line with the recommendation by Goh (2008) that highlighted how ESL learners typically identify their mistakes during the problem-solving stage as they reflect on the whole process of using metacognitive strategies to acquire the required listening skills. Essentially, it is important for learners to reflect on their learning process in order for them to understand and apply the learning outcomes into practice. This would improve their acquisition skills and understanding of solving problems that are related to listening skills. After all, metacognitive strategies primarily aim to allow ESL learners to reflect on their overall learning process for improvement (Vandergrift, 2002), which was clearly demonstrated in this study. Furthermore, the obtained findings in this study supported the

findings of Chamot (2005), whereby the use of metacognitive strategies motivates learners to be independent as they practice and reflect on the strategies applied. Problem-solving skills are vital for ESL learners in gaining the required listening skills, as they are required to practise and understand their mistakes. With that, learners are able to determine the actual purpose of the given tasks and ways of improving their performance in language acquisition, as demonstrated by the participants in the present study.

4.4.3 Sequence of strategies

a) To improve the results and to be aware of the consequences of avoiding the sequence

Following that, the participants also indicated that they applied the precise sequence of the stages involved in the implementation of metacognitive strategies. Otherwise, they encountered difficulties when the proper sequence was not applied:

> *Yes. I follow them in sequence and this has helped me to improve my results.*
> (T1, LA1)
> *I will do them according to the sequence because it is difficult for me if I skip one process I normally will be lost and that's it my scores will drop.*
> (T1, LA2)
> *Yes, I do… because if I don't follow it by sequence I find it difficult to apply this strategy when listening skill for example when I skip monitoring and do evaluation I cannot compare the sections I did well or not by just looking at the overall results.*
> (T1, LA3)
> *I will do them according to sequence because it is difficult for me if I skip one process I normally will be lost and that's it my scores will drop… I will do everything in the process as sequence because I will be*

able to improve my listening skill… otherwise I find it difficult because of the language spoken by the speakers from the audio is difficult to understand.

(T1, LB3)

Yes. I will do according to the sequence as all the parts in the strategies are important and missing one part will put me in a situation of lost and I face problem to focus for the next section… a few times, I tried skipping one of the strategies but it did not work for me because at the end I found out I have to follow it like a cycle then I am able to do well on my own.

(T1, LC1)

I sometimes skipped planning because there is not much time to plan on what I am about to listen depending on the number of questions in a section.

(T1, LB1)

I do skip monitoring because I find it time-consuming and I need to focus on the next section for the given stipulated time. If there's time then I will go through the strategies sequent.

(T1, LB2)

During the intervention stage, several participants highlighted that they performed all the strategies in sequence to improve their test scores:

Today I followed all the strategies from planning to problem-solving by sequence. Last week, I tried skipping monitoring and my score was 5/10 but this week it is 7/10.

(T4, LC4, GLC)

Today's exercise I followed all the strategies accordingly and I scored 8/10. I noticed if I try to skip then I lost focus for the next question like last week.

(T6, LA2, GLA)

Discussion

According to the participants, their test scores were affected when the sequence of the strategies was not properly applied, which demonstrated the importance of each strategy, namely planning, monitoring, evaluating, and problem-solving, in improving the test scores. Nevertheless, the main purpose of this study was not to improve the participants' test scores, but to demonstrate the influence of metacognitive strategies in improving the participants' performance to acquire the required listening skills. Besides that, the participants also highlighted that they were distracted when they tried to skip the sequence of strategies, which was difficult for them to get back on track for the next question or section. On a similar note, Goh (2006) stressed the importance of following the sequence of applying the metacognitive strategies for learners. Essentially, the process of acquiring learning skills ensures the proper learning outcomes using specific strategies, which emphasises the importance of applying metacognitive strategies appropriately for the learners to gain positive learning outcomes (Rost, 2006).

4.4.4 Advantages of using metacognitive strategies

a) ***Improve listening skills***

Most of the participants revealed that they improved their listening skills using metacognitive strategies:

> *There are many advantages I found when learning using this strategy… firstly I am able to learn on my own. Secondly, I found that I don't need to depend on anyone and I can practice the tests and exercises at anywhere and anytime.*
>
> (T1, LA2)

The advantage I have gained is that I found a way to learn listening because before this I only learned other skills like reading, writing, and speaking but none for listening.

(T1, LA3)

The strategies have become like a guide for me and every time now I want to do listening test or exercises it automatically runs in my mind.

(T1, LB1)

b) *Promote independent learning*

Adding to that, the participants acknowledged that the use of metacognitive strategies supported them to become autonomous in their learning process. According to the participants, the use of metacognitive strategies provided them the opportunity to master listening skills independently:

It allows me to learn on my own without depending on anyone but the strategies and I can do many practices on my own… I improved my scores for my listening tests and I like to learn listening skill more.

(T1, LA1)

I can do the exercises on my own without depending on my teacher… I have improved my listening skill especially when learning English for IELTS.

(T1, LC1)

I improved my scores for my listening tests and I like to learn listening skill more… The advantage I get is I found a way to learn listening because before this I just listen and answer without thinking.

(T1, LC4)

Discussion

With respect to the metacognition theory by Flavell (1979), learners are provided the opportunity to have autonomy in learning through metacognitive strategies, which was clearly demonstrated in the present study. The obtained findings highlighted two

significant advantages of using metacognitive strategies, namely improve listening skills and promote independent learning. The findings of the present study fully supported the obtained findings of prior studies (see Mareshal, 2007; Goh, 2006; Vandergrift, 2007), whereby explicit instruction on metacognitive strategies in listening allows learners to develop and improve their knowledge on how to acquire the required listening skills. It is essential for ESL learners to gain learning skills, especially in the context of IELTS listening. Since most of these learners are not exposed to conversations between native speakers, this may pose challenges for learners to maintain their consistency to acquire listening skills if they are not adequately equipped with the necessary learning skills. ESL learners need to familiarise themselves with independent learning through the acquired learning skills, especially when they have to cope with learning new subjects.

4.4.5 Disadvantages of using metacognitive strategies

a) ***More time to master the strategies***

The participants also revealed that they required more time to master the metacognitive strategies before they were able to apply these strategies during the learning process:

> *Using this strategy I have to work fast to move to other sections because it is time-consuming to do each process… sometimes this causes me to skip some of the strategies… I need more time to use the strategy at the beginning but now I am able to use them well… It needs more practices.* (T1, LA2)
>
> *I find that you must be able to apply the strategies correctly because if you don't follow the sequence then you will be lost and at the beginning stages you will need more time to be able to master the strategies… You need to do a lot of practice to get on hold this strategy and you have to*

be discipline in order to ensure you improve your learning using this strategy.

(T1, LA3)

Discussion

In the case of the present study, metacognitive strategies allow learners to be independent learners and promote self-learning and critical thinking, which require higher-order thinking skills. Nevertheless, learners require a certain amount of time to master metacognitive strategies through numerous practices. According to the participants, they required more practices to improve their skills using metacognitive strategies. In line with the findings of Rahimirad and Moini (2015), ESL learners do require more time to master new learning strategies for the process of acquiring language skills.

4.4.6 Learning aid

a) ***Develop more confidence***

The participants gained the confidence to undergo the IELTS listening tests when they applied metacognitive strategies, which differed from when they were not introduced to metacognitive strategies:

Yes. I feel much confidence now to do the IELTS listening tests… It has helped me like a guide to learn listening skill.

(T1, LB1)

Yes because it gives more confidence to learn listening skill compare to last time... I can say that I am able to learn listening skill on my own... It has helped me to overcome my problem to understand the audio played for listening test.

(T1, LB2)

It has overcome my problem because before this I didn't have a way to learn listening but now I feel relieved looking at my scores and I have more confidence.
(T1, LB3)

The participants also highlighted that they were able to understand the audio played during the exercises or tests:

It has helped me to overcome my problem to understand the audio played for listening test.
(T1, LC1)

Discussion

According to the participants, the use of metacognitive strategies increased their confidence in acquiring the required listening skills. ESL learners who are exposed to explicit learning strategies gain confidence and perform better in language tests (Vandergrift, 2007; Cahyono, 2015), which were demonstrated in the present study. The above responses also revealed that the participants were able to listen to the audio played. In other words, they were able to understand the conversations between native speakers despite the initial challenges of understanding their conversations among ESL learners (Abbas and Reza, 2011). The repetitive application of metacognitive strategies in IELTS listening practices helps ESL learners to perform well for listening tasks. In view of the above, the present study demonstrated metacognitive strategies as essential learning aid that supports the process of language learning, especially in mastering the required listening skills, and improves the listening scores.

4.4.7 Suggestions and comments

a) ***Should be introduced in schools***

The participants added that metacognitive strategies should be introduced in schools for learners to improve their listening skills and other language skills:

> *I wish I have learned this strategy long time back so that I can apply them from the beginning during my school days… I hope the institution will make this strategy in the syllabus so that other students can learn it.*
> (T1, LB3)
> *I think this strategy should be introduced in schools so that when the students come to college they will be able to learn listening skill easier.*
> (T1, LC2)
> *I hope that these strategies are introduced at a school level as for now I heard from my younger brother who is in primary school they have listening tests.*
> (T1, LC3)

Discussion

The obtained findings of the present study supported the claim by Vandergrift (2007), whereby early exposure to metacognitive strategies would help ESL learners to enhance their listening skills. Most learners tend to give up on acquiring listening skills and focus on improving other language skills in the early learning stage. The use of metacognitive strategies helps learners to simultaneously master the required language skills in order to improve their language proficiency effectively.

b) ***Provide more guidance***

One of the participants commented that teachers should provide more guidance on how to use metacognitive strategies:

I think the teacher should give us more guidance compared to 3 lessons which are not enough. This will give us time to use these strategies without referring to them a lot.
(T1, LC4)

Discussion

Through adequate guidance from teachers, learners are able to learn and apply what they learn. As highlighted by Goh (2006), the effectiveness of applying metacognitive strategies in the process of acquiring listening skills depends on how well the strategies are taught to learners, as not all learners are able to properly gauge themselves, specifically on whether they apply the strategies appropriately. Hence, they require further assistance and guidance from teachers towards becoming independent learners. In general, the participants were well aware of the advantages of metacognitive strategies in mastering listening skills. Under the guidance of teachers, the participants were able to apply a proper sequence of strategies, remain focused, and improve their listening skills in the IELTS listening preparatory course.

4.5 Chapter Summary

This chapter presented both the quantitative and qualitative findings and discussions of the present study. The results showed that metacognitive strategies namely the planning, monitoring, evaluating and problem solving should be used to guide ESL learners in acquiring IELTS listening skills. The results from the MALQ illustrated the level of awareness the participants from the experimental and the control group during the pre and post experimental stage which was supported by the learner's checklist which was gathered during the intervention stage.

Next the results from the T test conducted on the IELTS Listening test scores during the post experimental stage indicated the experimental group's scores were

significant compared to the control group. This was further supported with learners' exercises scores from week 1 until 6 of the experimental group which was significant, which was analysed using a one-way repeated measures Anova.

Finally, the results of the interview which was conducted during the post experimental stage revealed the perspectives of the participants of the experimental group on the use metacognitive strategies when acquiring IELTS listening skills. The data of the ways the participants applied the metacognitive strategies during the intervention stage was used to support the data from the interview. The conclusion, implications of study, and recommendations for future research will be presented in the following chapter.