### Metacognitive Listening Strategy Instruction for EFL Learners

**Taguchi Kaya**

*The Bulletin of the Institute of Human Sciences at Toyo University*

**Number** 19

**Page range** 63-83

**Year** 2017

**URL** [http://id.nii.ac.jp/1060/00008737/](http://id.nii.ac.jp/1060/00008737/)

---

<table>
<thead>
<tr>
<th>著者</th>
<th>田口 賀也</th>
</tr>
</thead>
<tbody>
<tr>
<td>著者別名</td>
<td>田口 賀也</td>
</tr>
<tr>
<td>言語</td>
<td>日本語</td>
</tr>
<tr>
<td>出版物</td>
<td>論文</td>
</tr>
<tr>
<td>年度</td>
<td>2017-03</td>
</tr>
<tr>
<td>版コード</td>
<td>6</td>
</tr>
<tr>
<td>版式</td>
<td>単行本</td>
</tr>
<tr>
<td>頭書</td>
<td>田口 賀也</td>
</tr>
</tbody>
</table>
Metacognitive Listening Strategy Instruction for EFL Learners

Kaya TAGUCHI*

According to Morley (2001), listening is used far more frequently than other skills, speaking, reading and writing, in our daily life. In most ESL/EFL classrooms, however, Siegel (2015) points out that listening instruction has been rather neglected in L 2 teacher education courses and in teacher manuals. There have been studies comparing the effectiveness of teaching top-down listening strategies with teaching bottom-up listening strategies or the combination of the two (Yeldham, 2015). As for strategy instruction studies, those with a metacognitive approach are currently drawing attention. On the other hand, they are not yet abundant enough to make specific guidance to teachers as to how they should teach L 2 listening. This quasi-experimental pilot study is an attempt to report whether teaching metacognitive listening strategies enhances learners’ listening performance on a test. It also seeks to explore what strategies are more frequently used by better listeners through quantitative and qualitative investigation.

Literature Review

Learning Strategies

Learning strategies can be described as “the thoughts and actions that students use to complete a task successfully” (Chamot, 2009, p. 53). A learner who uses strategic approaches to comprehend a text effectively can learn new information, retain it and use it to learn more effectively than those who do not use such approaches (Chamot, 2009). Chamot & O’Malley (1990) identified three broad categories of strategies: cognitive strategies, metacognitive strategies and social/affective strategies. Cognitive strategies can be categorized into two groups: (1) top-down cognitive strategies, which involve the use of the learner’s existing knowledge to predict, infer and comprehend a text, and (2) bottom-up cognitive strategies, which involve utilizing prominent textual cues and discourse markers (Yeldham, 2015). Metacognitive strategies are employed to manage comprehension processes by planning what to focus on at the beginning, monitoring how well a listener is processing an input, modifying

* A professor in the Faculty of Economics, and a research fellow of the Institute of Human Sciences at Toyo University
when necessary and evaluating how well s/he has completed a task. Social/affective strategies are the ones a language learner employs in order to get help from someone, especially in interactive situations. Good learners execute these strategies in effective and flexible manners so that they can allocate mental capacity for other processes, such as sorting and storing important information in the working memory. They can thus gain more knowledge and understand even more complicated and longer stream of sounds than those who lack effective strategies. What specific strategies are employed in listening and which ones are more effective than others? Let us proceed to the next section that discusses listening strategies specifically.

**Listening Strategies**

Studies that investigated listening strategies suggest that “good language learners” typically employ their background knowledge and try to connect their personal knowledge (cognitive strategies) to the material they are listening to. They also attempt to manage the speed or the complexity of the audio input. Moreover, they use metacognitive strategies, reviewing their understanding while listening for instance, to understand the input better and retain information, both main ideas and details. By contrast, less proficient listeners tend to work at a word-level and try to translate what they hear into their L1 without relating it to their personal knowledge, according to Berne (2004). Good listeners manage both cognitive strategies and metacognitive strategies, while less-skilled listeners seem to heavily rely on bottom-up cognitive strategies. Can we help less-skilled learners by teaching strategies? The next section briefly reviews past research on the teachability of listening strategies and the effects of instruction on learners.

**Metacognitive Listening Strategies and Self-Efficacy**

Following the preceding research that identified effective listening strategies, instructional studies have been conducted indicating that the strategies were teachable and instruction had positive effects on learners (e.g., Chen, 2009; O’Malley & Chamot, 1990; Thompson & Rubin, 1996; Yeldham & Gruba, 2014; Yeldham, 2015). Compared with the other two broad categories of strategies, top-down strategies and bottom-up strategies, teaching metacognitive strategies has been confirmed to improve listening performance by some studies (Cross, 2010; Vandergrift & Tafaghondtari, 2010). Metacognitive instruction is based on the original definition of metacognition, which pertains to the essential nature of learning: self-appraisal and self-regulation. It further suggests that metacognitive listening instruction can be beneficial in that learners tend to be more confident, more motivated and less anxious. It also seems to have a positive effect on listening performance, benefitting weak listeners the most (Goh, 2008). In other words, metacognitive strategy instruction appears to enhance learners’ self-efficacy, broadly defined as a “belief in one’s ability to carry out specific tasks successfully” (Graham, 2011), as well as their listening performance. Moreover, some studies have indicated self-efficacy in listening is positively correlated with listening performance (Chen, 2007; Mills et al., 2006). Although it is difficult
to find a causal relationship, metacognitive listening strategy instruction, self-efficacy, and listening performance are assumed to correlate with each other based on the findings in Graham, 2011; Chen, 2007; and Mills et al., 2006. This study seeks to investigate whether metacognitive instruction can improve learners’ listening performance and self-efficacy, and if there is a correlation among metacognitive strategy use, self-efficacy and listening performance in the EFL learners in this sample.

Hypotheses
This quasi-experimental study seeks to test the following hypotheses based on the preceding studies as mentioned above.
1. Teaching metacognitive listening strategies will enhance the listening performance of this sample of students as measured by two listening tests.
2. Teaching metacognitive listening strategies will enhance the self-efficacy of this sample of students as measured by a questionnaire.
3. Metacognitive listening strategy use, self-efficacy, and listening performance will have a statistically significant correlation as measured by Person Correlation.

Method

Participants
The participants consisted of first year economics majors (18-20 years old) at a private university in Tokyo enrolled in two of the required English courses the author taught in 2015. The students’ English proficiency in each course was considered lower intermediate. Their native language was Japanese, and none had spent any extended period of time (longer than a month) in an English-speaking environment. The experimental group started with 29 students, while the control had 31 when this study started. However, the number reduced to 16 (5 females and 11 males) in the experimental and 22 (12 females and 10 males) in the control group because some respondents missed the Pre-and/or Post-test days or chose not to make their data available for the study by declining to sign the Informed Consent Agreement. The two groups started out at statistically equal levels of listening performance, as measured by their TOEIC listening test scores and the Pre-test scores as the t-tests or Mann-Whitney tests shown in Table 1. The data used in this study was only from those who submitted their Informed Consent Agreements, which allowed me to obtain their TOEIC scores from the school.

Materials and Procedures

Treatment materials. Both the experimental and control groups used the same listening textbook, Devel-

---

1 The participants’ average TOEIC Listening score, 252-254, is CEFR A 2 to B 1, according to the official TOEIC website, https://www.ets.org/s/toeic/pdf/toeic_cef_mapping_flyer.pdf
Opining Tactics for Listening, 3rd edition published by Oxford University Press. It has 24 units, each of which consists of a pre-listening activity, as well as three listening activities with multiple-choice questions and pronunciation and dictation exercises for focused practice pronunciation. This study covered Units 14-20. Topics included themes such as Shopping Problems (Unit 14), Hotel Services (15), and Movies (16).

**Getting Ready, Listening 1 and Listening 2.** In a weekly lesson, the study participants first previewed a unit through learning relevant vocabulary on the first page on each unit. They sometimes answered some questions about their personal experience related to the topic of the unit to activate their knowledge about the unit. After discussing the answers and ideas in pairs or class, they moved on to the listening exercises, where they listened to short conversations and chose the best answers to multiple-choice questions. Since this could be a less challenging activity for some advanced students, I gave them additional questions to see if they understood the main ideas and/or further details of the conversations. I also encouraged them to take notes, especially about the items that led them to their choice. The students exchanged their choices/ideas with their partners before discussing them in class. The time spent so far in each lesson was about 30-40 minutes.

**Listening 3.** After the procedures above, the students worked on a longer and faster audio clip. Although the topic was still the same as the preceding exercises, this section was aiming to test listening skills that would be required in real life situations. First, while the listeners would only need to catch one or two phrases to get a right answer in Listening 1 and 2, this time they would have to use both bottom-up and top-down cognitive strategies efficiently to retain the main idea. Second, they also needed to use working memory more efficiently to answer textbook questions than in the preceding exercises. The format of this section was quite similar to the ones before, with multiple-choice questions. In this section, the control and experimental groups received different instructions. See further details in Metacognitive Listening Strategy Instruction in the Experimental Group below.

**Pronunciation/Dictation.** This section dealt with various pronunciation points, such as sentence stress.

---

2 Scores on TOEIC Listening Section range from 5-495.

3 This pre-test (and the post-test) ranges from 0-42.
(Unit 17) superlatives -est (19), and plural -s endings (20), for example. The students listened to focused pronunciation examples, practiced saying the pronunciation themselves, and filled out blanks in a short dialog to review.

**Metacognitive Listening Strategy Instruction in the Experimental Group**

In *Listening 3*, the students in the experimental group received metacognitive listening strategy instruction in addition to cognitive strategy instruction, while those in the control had only cognitive strategy instruction. Both groups listened to the same audio the same number of times.

The instructed metacognitive strategies were based on the Metacognitive Awareness Listening Questionnaire (MALQ, Vandergrift et al. (2006), Appendix A). I gave the students the list of items on the questionnaire in Japanese and explained them all in the first strategy lesson. In the following strategy lessons I modeled how to use one or more strategy items before and after listening to an audio clip.

Not only did I explain the strategies in general terms, I also specified how to keep a reflection journal in class (adapted from Verdergrift (2004), Appendix B). The journal entries were allowed either in Japanese or in English. I checked the comprehension question answers to show how such strategies can be helpful to get a correct answer. The students planned how to listen based on the heading, pictures, and questions presented in the textbook, and predicted what they would hear in the Planning Stage. After they listened to an audio clip once, they verified their predictions and made corrections if necessary. They also talked to their partners to compare ideas. This is the First Verification Stage. In the Second Verification Stage, they listened to the audio once more to resolve earlier disagreements. They sometimes listened to the audio clip an additional time. Then I gave a transcript to let the students verify their answers by themselves first, and then discuss them in class (Final Verification Stage). Finally, they moved on to the Reflection and Goal Setting Stage, in which they reviewed their strategy use and what they should have done, and specified what they should do next time. The students worked individually first, and then talked to their partners. While they were doing this, the author walked around to listen to their discussions and gave feedback to the class when necessary. The author told them that instead of making up their own story based on words they were not sure of, using common sense and following the main idea often leads to better comprehension, for example.

Both the experimental group and the control group had many opportunities to use cognitive strategies throughout this listening course. For example, some students tried to activate their personal knowledge about the topic they were working on by sorting the audio input into main ideas and details. In this *Listening 3* section, on the other hand, the experimental group also used metacognitive strategies. They were told to be active listeners by preparing and planning which strategy they were going to use, monitoring its effectiveness, considering whether they could/should use or replace it with other strategies, and evaluating the strategy use for future listening (adapted from Anderson (2002)).
**Listening Strategy Instruction Time**

The students in the experimental group received 20-minute metacognitive strategy listening instruction regularly over the course of 8 weeks in a 15-week semester. The instruction was once a week, starting in October 2015 and ending in early December. These lessons were in addition to the regular English listening instruction from the teacher/researcher. The total strategy instruction time was about 160 minutes (2 hours and 40 minutes). The students in the control group attended the regular listening lessons, but received no explicit metacognitive strategy instruction. To compensate for the time, I allowed the control group to spend a little longer talking to partners in Getting Ready, Listening 1 and 2. I made sure that the amount of audio playing time was the same in the two groups. The total class time that the participants in both groups spent was approximately 12 hours, over 8 weeks (90 minutes times 8 weeks), including the metacognitive strategy instruction time (about 2 hours and 40 minutes).

**Assessment Material 1: Measure of Listening Proficiency**

As an assessment for the participants’ listening performance, I administered the Pre-Test specified above, a multiple-choice listening test with 42 items before the first strategy instruction lesson in September 2015 and the same test after the final strategy instruction lesson in December 2015 (Post-Test). The test was a shortened version of a TOEIC Listening Section, which lasted close to 20 minutes.

The students’ full TOEIC Listening Section scores (with 100 multiple-choice questions, 45 minutes) were also obtained as an additional listening proficiency assessment. They took the test in April in 2015 and in January 2016. The assessment and the treatment are summarized in Table 2.

**Assessment Material 2: Measure of Listening Strategy Use**

Immediately after the Pre- and Post-tests, the students completed two questionnaires; one was the MALQ, and the other was about self-efficacy. The MALQ is a 6-point Likert scale questionnaire that assesses five distinct factors in listening: planning and evaluation (“the strategies that listeners use to prepare themselves for listening, and to evaluate the results of their listening efforts”); directed attention (“the strategies that listeners use to concentrate and to stay on task”); personal knowledge (“listeners’ perceptions concerning the difficulty presented by L2 listening and their L2 listening self-efficacy”); (no) mental translation (“the strategies that listeners must learn to avoid if they are to become skilled listeners”); problem-solving (“a group of strategies used by listeners to make inferences - such as strategic guessing - and to monitoring these inferences”). The internal reliabilities of these factors were reported to range from .68 (for the four items on the directed attention) to .78 (for the three items on the mental translation) (Vandergrift et al., 2006, p.446).

---

4 The same test was used at the pre- and post treatment stages because the author decided that there was a sufficient period of time between the two stages as Cross & Vandergrift (2014) suggests.
Assessment Material 3: Measure of Self-Efficacy for Listening Activities

A questionnaire developed by Kassem (2015) was used to measure the level of the participants’ listening self-efficacy (Appendix C). It consists of 40 items, and uses a 6-point Likert scale, although the original version has a 5-point scale. Kassem constructed the questionnaire based on RSPS—the Reader Self-Perception Scale—developed by Henk & Melnick (1995) since he regards the self-efficacy construct in reading and listening as similar to each other. This scale seeks to measure three of the RSPS’ dimensions: (1) progress: how a respondent perceives his/her present performance compared with his/her past performance (2) observational comparison: how a respondent perceives his/her performance compared with his/her peers’ and (3) physiological states: how a respondent feels during listening. Kassem includes two more dimensions in the questionnaire, which are (1) strategic awareness: whether a respondent can handle a listening task and overcome difficulties, and (2) challenge: whether a respondent is willing to face such a task. The internal reliability of this questionnaire is .92, based on Kassem’s pilot study.

Scoring Procedure

For the Pre- and Post-Tests, one point was awarded for each correct answer, with a maximum possible total score of 42 points. The scores of the TOEIC Listening Section in April and January were obtained from the school with the permission from the participants. The MALQ has question items that are reverse scored (Items 3, 4, 8, 11, 16 and 18). The answers are grouped together according to the five factors. Items 1, 10, 14, 20 and
21 are grouped as “planning and evaluation,” Items 2, 6, 12 and 16 are as “directed attention,” Items 3, 8, and 15 are as “personal knowledge,” Items 4, 11 and 18 are as “(no) mental translation,” and finally Items 5, 7, 9, 13, 17 and 19 are as “problem-solving.” The Self-Efficacy Questionnaire has also some items that are reverse scored. Specifically, these are questions 3, 4, 6, 7, 14, 19, 21, 25, 27, 33, 35 and 38. Both the MALQ and Self-Efficacy Questionnaire use a 6-point Likert scale in which the higher number indicates the stronger agreement to a question: Strongly agree (6)-Agree (5)-Partly agree (4)-Slightly disagree (3)-Disagree (2)-Strongly disagree (1).

Instrument Reliability. The following (Table 3) shows the level of internal consistency of the questionnaire used in this study. One item, “directed attention,” showed a somewhat weak consistency, which has been analyzed below with extra caution.

Data Analysis. Due to a small sample size, the total 38 participants (16 in the experimental and 22 in the control group) the data was analyzed by non-parametric tests, as well as parametric tests to test the hypotheses and investigate the participants’ listening test scores, metacognitive strategy use and self-efficacy.

Results

Pre-Treatment Stage

Results from the pre-treatment one-way ANOVA are shown in Table 4, which indicated no statistically sig-

---

**Table 3**

*Instrument Reliability for Five Factors in MALQ and Self-Efficacy Questionnaire*

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOEIC Listening Test</td>
<td>.92-.93(^5)</td>
<td>100</td>
</tr>
<tr>
<td>Pre- and Post- Tests</td>
<td>.715</td>
<td>42(^7)</td>
</tr>
<tr>
<td>Planning/Evaluation</td>
<td>.726</td>
<td>10</td>
</tr>
<tr>
<td>Directed Attention</td>
<td>.587</td>
<td>8</td>
</tr>
<tr>
<td>Person Knowledge</td>
<td>.832</td>
<td>6</td>
</tr>
<tr>
<td>(no) Mental Translation</td>
<td>.810</td>
<td>6</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>.797</td>
<td>12</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.937</td>
<td>80</td>
</tr>
</tbody>
</table>

---

\(^{5}\) The reliabilities for MALQ and Self-Efficacy here were from the participants in this study, not from the original paper (Vandergrift et al., 2006 and Kassem, 2015, respectively).

\(^{6}\) Liao, Hatrak and Yu (2010)

\(^{7}\) The number of the items is as twice as the number on one test/questionnaire because one person took the same test/questionnaire twice.
significant differences between the two groups on any of the instruments at the $p < .05$ level.

**Post-Treatment Stage**

The following Table 5 shows there were no statistically significant differences between the two groups at the time of Post-Treatment on any of the instruments at the $p < .05$ level.

**Over Time**

On the RM ANOVA (Table 6), there was a noticeable difference in Pre- and Post-Test Listening for the experimental group, with a rather significant effect size ($-.860$), while the control group showed a significant difference over time in TOEIC Listening, with a medium effect size. Both groups showed a statistically significant

---

Table 4

*Pre-Treatment Group Comparisons for Dependent Variables (One-Way ANOVA)*

<table>
<thead>
<tr>
<th>Instrument used</th>
<th>Group</th>
<th>M (and SD)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOEIC Listening</td>
<td>April</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>252.81 (27.62)</td>
<td>1, 36</td>
<td>.024</td>
<td>.877</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>254.55 (37.76)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Test Listening</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>15.75 (2.62)</td>
<td>1, 36</td>
<td>1.371</td>
<td>.249</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>17.14 (4.16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MALQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>3.74 (.47)</td>
<td>1, 36</td>
<td>.185</td>
<td>.670</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>3.81 (.53)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>3.11 (.76)</td>
<td>1, 36</td>
<td>.020</td>
<td>.888</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>3.15 (.57)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5

*Post-Treatment Group Comparisons for Dependent Variables (One-Way ANOVA)*

<table>
<thead>
<tr>
<th>Instrument used</th>
<th>Group</th>
<th>M (and SD)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOEIC Listening</td>
<td>January</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>272.19 (51.86)</td>
<td>1, 36</td>
<td>.176</td>
<td>.677</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>279.55 (54.44)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Test Listening</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>18.38 (3.44)</td>
<td>1, 36</td>
<td>.072</td>
<td>.790</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>18.77 (5.15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MALQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>3.91 (.40)</td>
<td>1, 36</td>
<td>.533</td>
<td>.470</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>3.80 (.53)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>3.56 (.48)</td>
<td>1, 36</td>
<td>.537</td>
<td>.469</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>3.46 (.38)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

8 Pre-Test and Post-Test (42-item multiple-choice listening test, score ranges 0-42), TOEIC listening section (100 items, score ranges 5-495), MALQ (21 item 6-point Likert scale questionnaire), Self-Efficacy Questionnaire (40 item 6-point Likert scale questionnaire).
difference over time in Self-Efficacy, with a medium effect size.

Testing of the Hypotheses

Hypothesis 1 : Teaching metacognitive listening strategies will enhance the listening performance of this sample of students as measured by two listening tests.

The RM ANOVA (Table 6) and effect size calculations provided weak evidence to support the first hypothesis. The RM ANOVA showed that development in Post-Test reached significance for the experimental group, $F (1, 15) = 9.858, p = .007, d = -0.860$, but not for the control group, $F (1, 21) = 3.388, p = .080, d = -0.348$.

On the other hand, as for TOEIC Listening, the experimental group showed only a little increase $F (1, 15) = 2.820, p = .114, d = -0.466$ without showing any statistical significance, while the control group presented a statistically significant progress, $F (1, 21) = 6.150, p = .022, d = -0.534$. Therefore the hypothesis that metacognitive
strategy instruction will improve the experimental group’s listening comprehension scores cannot be supported. The participants in the experimental group made statistically significant progress only measured by one of the two listening instruments, while those who did not receive such instruction showed improvement on the other listening test (TOEIC). The same results were drawn from a non-parametric test, the Wilcoxon Signed Ranks Test (Table 7).

Hypothesis 2: Teaching metacognitive listening strategies will enhance the self-efficacy of this sample of students as measured by a questionnaire.

Both the parametric and non-parametric tests (Tables 6 and 7) have shown that the participants, not only in the experimental but those in control groups, showed a significant improvement in the self-efficacy scores after the treatment period. This indicates that their improved self-efficacy did not appear to be related to the listening strategy instruction, but to the sheer amount of listening practice (12 hours over 8 weeks). They may have improved their self-efficacy simply because they spent enough time listening to English, not because they received strategy instruction.

Hypothesis 3: Metacognitive listening strategy use, self-efficacy, and listening performance will have a statistically significant correlation as measured by Person Correlation.

As Table 8 shows, this study confirms that there is a rather strong correlation between the metacognitive listening strategy use and self-efficacy ($r = .775^{**}$), a weak correlation between the metacognitive listening strategy use and listening performance ($r = .378^*$ for TOEIC Listening and $r = .439^{**}$ for Post-Test), and a weak correlation between self-efficacy and listening performance ($r = .439^{**}$ for TOEIC Listening and $r = .330^*$ for Post-Test).

### Table 8

*Person Correlations for TOEIC Listening Scores, Post-Test Listening Scores, MALQ and Self-Efficacy at Post-Treatment Stage*

<table>
<thead>
<tr>
<th></th>
<th>TOEIC Listening</th>
<th>Post-Test Listening</th>
<th>MALQ</th>
<th>Self-Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOEIC Listening</td>
<td>.534^{**}</td>
<td>.378^*</td>
<td>.439^{**}</td>
<td>.330^*</td>
</tr>
<tr>
<td>Post-Test Listening</td>
<td>.534^{**}</td>
<td>.439^{**}</td>
<td>.330^*</td>
<td>.775^{**}</td>
</tr>
<tr>
<td>MALQ</td>
<td>.378^*</td>
<td>.330^*</td>
<td>.775^{**}</td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>.439^{**}</td>
<td>.330^*</td>
<td>.775^{**}</td>
<td></td>
</tr>
</tbody>
</table>

*Taguchi: Metacognitive Listening Strategy Instruction for EFL Learners*

---

9 $^* p < .05$ level, $^{**} p < .01$ level
though the improvement is not statistically significant.

As for the differences in the use of metacognitive strategies between the experimental and control groups, Figures 1 and 2, which indicate the means in each sub-group of MALQ, shows that the use of “Person Knowledge” is one of the striking differences. This strategy had not been used much by the experimental group in the beginning (3.40), and remained almost the same in the end (3.42). However, the control group had used this with higher frequency (3.58) and employed it even more frequently at the end of the study (3.70).

The other difference is that the experimental group learned to use “Planning/Evaluation” strategies more often than at the pre-treatment stage, scoring from 3.75 to 4.10. In addition, while the differences in frequency are not as clear as “Planning/Evaluation,” the other two sub-groups of strategies, “Directed Attention” and “Problem-Solving,” also came to be more frequently used by the participants in the experimental group than those in the control group (from 3.98 to 4.14, and from 3.75 to 3.89, respectively). The control group, on the other hand, came to use those strategies less frequently (from 4.07 to 4.05, and from 4.00 to 3.98).

**Good Listeners’ Strategies**

In order to explore learners’ use of listening strategies, I read closely the participants’ reflective journal entries and analyzed the comments, especially of those whose listening test scores were higher than the average in this study, with the purpose of identifying effective strategies to use for better listening. To choose such learners,
I first divided the participants into three groups according to their scores on the TOEIC Listening taken in January and the Post-Test. Those whose TOEIC Listening scores were half a standard deviation below the mean or lower were labeled “low scorers.” Those who were half a standard deviation above standard deviation or higher were labeled “high scorers.” The rest were classified as “mid-scorers.”

Let us look at the journal entries provided by the 6 “high-scorers” (Table 10) to see what strategies they used and whether they came to use strategies more often.

All the six participants wrote they planned before listening by guessing words and phrases that they would hear in each upcoming audio clip based on the pictures and headings of their textbooks, probably because as shown in the journal in Appendix B, guessing was part of their assignment. As for directed attention, two of the six participants, who gained the highest TOEIC listening scores of all the participants, wrote that they tried to focus, or they would try harder the next time. Only one person, and only once, mentioned mental translation in the journal by saying he tried not to translate word by word. However, when it comes to problem solving, all wrote about this at least once or twice each week, while there was no entry at all about Personal Knowledge, which is listeners’ perceptions concerning the difficulty presented by L 2 listening and their self-efficacy in L 2 listening, as mentioned earlier. None of the six students wrote whether they were nervous, or how difficult/easy they found English listening. This seems to be general tendency among the students in the experimental group as Figures 1 and 2 show.

**Discussion**

This research investigated the effectiveness of metacognitive listening strategy instruction to EFL learners in terms of their listening proficiency and their self-efficacy. In addition, it sought to explore the extent that metacognitive listening strategy use, self-efficacy and listening performance correlate in this group of study participants. Given the results of the preceding studies (Cross, 2010; Vandergrift & Tafaghondtari, 2010), Hypothesis 1 of the study was that teaching metacognitive strategies would enhance learners’ listening performance.
Contrary to the expectation, though, both the experimental group and the control group showed improvement in at least one of their two listening test scores. In other words, the participants who did not receive strategy instruction also raised their listening test scores. This indicates that the learners’ higher test scores at the post-treatment stage was not necessarily due to the strategy instruction. Their performance might have been enhanced primarily because of the amount of the listening practice time, which was a common denominator for both groups. This seems to be able to explain why both the groups had increased self-efficacy scores as stated in Hypothesis 2 that teaching metacognitive listening strategies would enhance learners’ self-efficacy. Their improved self-efficacy scores seem to have been due to the sheer amount of listening practice (12 hours over 8 weeks).

The results of testing those two hypotheses appear to suggest that since the participants had not had enough listening practice before, giving regular listening practice along with the instructor’s explanation of the texts would have been sufficient to improve their listening test scores. This would be also true of the participants’ self-efficacy. The self-efficacy questionnaire intended to measure how the learners viewed their listening performance in comparison with their own past performance and with those of their peers, and how they felt during listening, in addition to the level of strategic awareness and willingness to face challenges. Although the treatment period was not long - over 8 weeks, this might have helped learners become more confident of their listening performance, irrespective of whether they received any listening strategy instruction or not.

In spite of that the evidence was relatively weak, this study supported Hypothesis 3, that metacognitive listening strategy use, self-efficacy and listening performance are correlated. The study found a rather strong correlation between the metacognitive listening strategy use and self-efficacy ($r=.775^{**}$), a weak correlation between the metacognitive listening strategy use and listening performance ($r=.378^{*}$ for TOEIC Listening and $r=.439^{**}$ for Post-Test), and a weak correlation between self-efficacy and listening performance ($r=.439^{**}$ for TOEIC Listening and $r=.330^{*}$ for Post-Test. It seems somewhat logical that strategy use and self-efficacy were strongly correlated because both measure how conscious the learners were of their listening practice. Moreover, this result indicates that merely being aware may not lead to better listening performance. This raises a question whether teaching metacognitive listening strategies should benefit low-skilled learners or not (Goh, 2008, p.196). This current study suggests that since those who have not had enough listening practice may not be able to take advantage of listening strategy instruction, it seems they first need to learn basic bottom-up and top-down listening skills for an extended period time to be ready for benefitting from strategy instruction. Even some of the high scorers in the experimental group indicated they had to be careful with confusing words such as “full” vs. “poor” and “won’t” vs. “want.” The proficiency levels of the learners in this study may have been so low in comparison with those in preceding strategy instruction studies that past study results may not have been applicable to the current participants. For instance, all of the participants in Cross (2010) were attending “an advanced-level English course.” The participants in Mills et al. (2006) and Vandergrift & Tafaghodtari (2010) were learning French at a university in the US, most of whom were reasonably assumed to speak English...
as their native or semi-native language, and therefore their L 2 (French) proficiency may be higher than the current study participants L 2 (English) proficiency considering the differences between their L 1 s and L 2 s.

Regarding metacognitive listening strategy use, the experimental group came to use strategies more often at the post-treatment stage compared to the control group, whose overall strategy use remained unchanged. Although this indicates that strategy instruction led to more strategy use among some learners, the fact that this did not lead to their higher listening performance seems to further confirm the above mentioned implication, that most of the participants of this study may not have had enough listening practice or acquired basic skills to benefit from strategy instruction. Those who can benefit from strategy learning to get a higher score on listening tests would be those who have already practiced listening, at least 8 weeks as in this study. To those who have not had such practice yet, strategy instruction may not yield higher listening comprehension test scores.

Limitations and Future Research

One of the limitations of this study was the small sample size, and another was that there was only one instructor, who also was the author. These factors make it difficult to generalize the findings. In addition, the qualitative analysis of the journal entries was based on a single coder, who was also the author. Future research should use multiple independent coders. Considering that almost all the journal comments were concerned with the learners’ predictions of the upcoming listening audio, their comprehension of the actual audio, and their actual use and evaluation of strategies, I believe understanding what they meant to convey was straightforward. However, different interpretations might have been possible if multiple coders were employed.

Although the data from this study supported only one of the three hypotheses in part, the results have suggested possible future directions for EFL listening instruction studies, one of which is to investigate how proficient the learners need to be to take advantage of learning metacognitive listening strategies. The fact that this study has shown that teaching metacognitive listening strategies did not enhance the learners’ listening performance implies that when teaching groups of learners similar to those in the current study, teachers may first need to know that their students’ proficiency level is high enough to use metacognitive strategies effectively. Considering the TOEIC test scores of the participants of the study were almost the same as those of general Japanese college students (253.7 for the participants and 250.0 for the Japanese college students, according to 2016 data from IIBC), it seems that delaying metacognitive strategy instruction should be encouraged in many classrooms in Japan at least, probably in many EFL classrooms, where students are not exposed to English listening tasks regularly. In addition to identifying a suitable proficiency level for metacognitive strategy instruction, seeking sufficient amount of listening practice to reach a point where metacognitive listening strategy instruction is worthwhile should be conducted. Specifically, future studies should extend the teaching period by one more semester, to the total of 15 weeks, to identify whether the participants could improve their listening performance, being equipped with basic listening skills and metacognitive strategies over a longer time frame.
Appendix A

Metacognitive Awareness Listening Questionnaire (MALQ) and List of Metacognitive Strategies Instructed to the Participants (adapted from Vandergrift et al., 2006)

1. Before I start to listen, I have a plan in my head for how I am going to listen. (PLAN)
2. I focus harder on the text when I have trouble understanding. (DIRECTED)
3. I find that listening is more difficult than reading, speaking, or writing in English. (PERSON)
4. I translate in my head as I listen. (MENTAL)
5. I use the words I understand to guess the meaning of the words I don’t understand. (PROBLEM)
6. When my mind wanders, I recover my concentration right away. (DIRECTED)
7. As I listen, I compare what I understand with what I know about the topic. (PROBLEM)
8. I feel that listening comprehension in English is a challenge for me. (PERSON)
9. I use my experience and knowledge to help me understand. (PROBLEM)
10. Before listening, I think of similar texts that I may have listened to. (PLAN)
11. I translate key words as I listen. (MENTAL)
12. I try to get back on track when I lose concentration. (DIRECTED)
13. As I listen, I quickly adjust my interpretation if I realize that it is not correct. (PROBLEM)
14. After listening, I think back to how I listened, and about what I might do differently next time. (PLAN)
15. I don’t feel nervous when I listen to English. (PERSON)
16. When I have difficulty understanding what I hear, I give up and stop listening. (DIRECTED)
17. I use the general idea of the text to help me guess the meaning of the words that I don’t understand. (PROBLEM)
18. I translate word by word, as I listen. (MENTAL)
19. When I guess the meaning of a word, I think back to everything else that I have heard, to see if my guess makes sense. (PROBLEM)
20. As I listen, I periodically ask myself if I am satisfied with my level of comprehension. (PLAN)
21. I have a goal in mind as I listen. (PLAN)

The items here are also used as a list of strategies to teach metacognitive strategies, although the items were presented in groups according to the four types: Planning/Evaluation, Directed Attention, Person Knowledge, Mental Translation, and Problem Solving.

The abbreviations stand for Planning/Evaluation (PLAN), Directed Attention (DIRECTED), Person Knowledge (PERSON), Mental Translation (MENTAL), and Problem Solving (PROBLEM).

The item with an underlined number is reverse-scored.
Appendix B

Reflective Journal (based on Vandergrift, 2004, partly modified for this research)

Pre-listening (planning strategy)
Predict words/phrase and information you will hear based on the topic and text type.

First listening (monitoring and evaluation strategies)
A. Verify your initial predictions and make corrections as needed.
B. Work with your partner to verify your predictions. Compare the strategies you used with your partner’s strategies to see which strategies you should use next.

Second listening (monitoring, evaluation, problem-solving strategies)
A. Listen one more time to see the correction(s) you just made were fine.
B. Work with your partner to verify your ideas. Compare the strategies you used with your partner’s to see which ones worked best.

Final verification stage (evaluation strategy)
Verify your listening comprehension by reading a written transcript of the audio text.

Reflection and goal-setting (evaluation and planning strategies)
Work with your partner to discuss how your listening activities are going.
Evaluate your listening strategies and reflect on your strategy use to prepare for the next listening activities.

Appendix C

Self-Efficacy Questionnaire (adapted from Kassem, 2015)

1. Listening to English is a pleasant activity for me.
2. When I compare myself to other students in my class, I’m a good listener.
3. Before I listen to an English text, I don’t feel that I’ll understand it well.
4. I often end up translating word by word without understanding what I’ve listened to.
5. I can handle more challenging listening materials than I could before.
6. I believe that I’m a poor listener.
7. Listening material for EFL learners should be delivered at a slower rate than the rate of native speakers.
8. When listening to English, it’s easy for me to make guesses about the parts I miss.
9. I feel stressed when I listen to English material.
10. I believe that my listening comprehension improves with time.
11. When I listen, I don’t have to try as hard to understand as I used to do.
12 When I listen, I can answer more questions than other students.
13 I have the ability to improve my listening skill.
14 It bothers me if the teacher gives me listening assignments.
15 I understand what I listen to better than I could before.
16 I feel more relaxed and confident when I read than when I listen.
17 When listening to English material, I know how to guess difficult vocabulary items.
18 In the listening class, I like to volunteer to answer questions.
19 I often get so confused that I cannot remember what I’ve heard.
20 I can make a plan about the listening task before I begin to listen.
21 When I find listening difficult, I usually give up.
22 When I listen, I recognize more words than before.
23 I have no problem listening to someone who speaks English fast.
24 I have the ability to concentrate on the content to which I listen.
25 I don’t feel confident in my English listening skills.
26 I know what strategies to use when I listen to English.
27 I feel uncomfortable listening without a chance to read the transcript of the speech.
28 I’m one of the best listeners in my class.
29 If listening gets difficult for me, I am successful at fixing it up.
30 I can concentrate more when I listen than I could before.
31 When I listen, I need less help than I used to.
32 I know what to do when I don’t understand what I’m listening to.
33 When listening to English, I get nervous when I don’t understand every word.
34 Listening is easier for me than it used to be.
35 My understanding of difficult listening material doesn’t improve.
36 The more difficult the listening task is, the more challenging and enjoyable it is.
37 I feel good about my listening comprehension skill.
38 I am less confident in my listening skill than other students.
39 I can understand what I listen to even if I don’t know several vocabulary items.
40 Lack of control over listening material isn’t a problem for me.
Self-efficacy, a belief in one's ability to succeed, is one of the most important aspects in learning a foreign language because the learning requires making continuous efforts even when one faces challenges and feels like discontinuing the endeavor. Since this study has indicated that strategy instruction seems to raise self-efficacy among learners, research on listening strategy instruction should merit further investigation.

References


This quasi-experimental study investigated the effectiveness of metacognitive listening strategy instruction for Japanese EFL learners. Statistical tests indicated both the control group, which attended a listening course only, and the experimental group, which received additional strategy instruction, improved their listening test scores and the self-efficacy scores. The study also found a strong correlation between the metacognitive listening strategy use and self-efficacy, a weak correlation between the metacognitive listening strategy use and listening performance, and a weak correlation between self-efficacy and listening performance. This finding suggests metacognitive strategy instruction may not be beneficial to those who do not have enough listening proficiency or prior practice.

Key words: metacognition, listening, strategy instruction, self-efficacy, EFL