The Journal of Asia TEFL

Investigating the Effects of Metacognitive Instruction in Listening for EFL Learners

Ayako Kobayashi
Konan University, Japan

This study investigated the effects of metacognitive instruction in listening for EFL learners over a semester. Participants (*N* = 48) were sampled from TOEIC classes in a private university in the western part of Japan where the researcher had been working as an English instructor. They were sophomores whose majors were not English. The experimental group (*n* = 26) received metacognitive instruction in listening (i.e., they were taught how to listen to texts and how to improve listening skills through metacognitive processes as well as activities such as planning, monitoring, and reflecting). The contrast group (*n* = 22), taught by the same teacher, did not receive metacognitive instruction although they listened to the same listening materials and received more listening input. Results of the questionnaire (SRLLQ, the Self-Regulated Learning in Listening Questionnaire, Kobayashi, 2017a) showed that students in both groups became more self-regulated learners, but it was also found that the experimental group made greater gains in listening proficiency and regulation of cognition. Moreover, it was verified that learners with low listening proficiency in the experimental group benefited the most from such metacognitive instruction.

Key words: classroom research, EFL learners, listening comprehension, metacognitive instruction, learner autonomy

Introduction

For successful communication (i.e., to understand what the speaker is saying and to respond), comprehension skills are vital. Previous research (e.g., O' Malley, Chamot, & Kupper, 1989; Vandergrift, 2003) shows that skilled second language listeners use comprehension strategies such as elaboration and inferencing. Because these strategies help learners comprehend better, they have been demonstrated in listening textbooks. Although these comprehension techniques are important, they would not be sufficient in helping learners improve their listening beyond the classroom (Goh, 2008) because students who are studying in an EFL (English as Foreign Language) environment such as Japan often do not have a clear goal of learning English and they do not necessarily see the importance of learning English (e.g., Sampson, 2016; Yashima, 2000). To improve their listening skills for successful communication, it is important for teachers to teach not only those comprehension strategies but also techniques for becoming more autonomous learners (who have goals in English language learning) so that students can learn more effectively and efficiently outside the classroom and can improve their English in an EFL environment (e.g., Kobayashi, 2014, 2016).

Autonomous learners have goals. They plan and act to achieve their goals. They monitor their own learning and regulate it to achieve their goals (Holec, 1979). Such processes where learners actively participate in their own learning process metacognitively, motivationally, and behaviourly, is called

s*elf-regulated learning* (Zimmerman, 1986, 2008). Self-regulated learners are those who possess the capacity to control their metacognition, motivation, and behavior and are active participants in planning, monitoring, and evaluating their goals. Metacognition is our mental capability. It is often referred to as thinking about our own thinking. When we comprehend our thoughts, we can sense our progress and we can use that awareness in our mental activities (Zull, 2011). Thus, autonomous learners and self-regulated learners are metacognitively aware learners (i.e., they are aware of their own thinking process) and share the similar characteristics in this sense. They both have goals and try to achieve them by monitoring, evaluating, modifying or setting new goals again and acting to achieve them (Kobayashi, 2017b). Because metacognition enables learners to evaluate themselves, set goals, monitor, and reflect on their learning, without metacognition, both autonomous learners and self-regulated learners do not exist (Gao & Zhang, 2011; Ozaki, 2006). Hence, to enhance learner autonomy or self-regulation, it is important to activate their metacognition (Takeuchi, 2010).

Literature Review

Metacognition

Although there are a plethora of perspectives on the construct of metacognition (Veenman, Van Hout-Wolters, & Afflerbach, 2006), many researchers agree that metacognition is composed of these two: metacognitive knowledge and metacognitive skills (e.g., Flavell, 1979; Goh, 2008; Schraw, Crippen, & Hartley, 2006). Metacognitive knowledge contains knowledge about learners (e.g., their motivation, strength and weakness), knowledge about goals and nature of the tasks, and strategy knowledge (e.g., what they are, how and when they are used, and why they are used). Metacognitive skills include skills such as planning, monitoring, and evaluating (Goh, 2008).

Learners may encounter many psychological and cognitive problems when trying to improve listening skills (Goh, 2008). A study (Kobayashi, 2017a, p. 168) presents that Japanese learners mainly face these listening problems:

1.   Speakers speak too fast to comprehend (they cannot understand the content at all);
2.   Pronunciation and liaison are unfamiliar; and
3.   They cannot catch difficult words (and they get panic and unable to listen).

Considering Japanese students' problems above, teacher-modelling and scaffolding through metacognitive processes would be useful as they help learners learn how to listen and increase learners' motivation as well (Vandergrift, 2004, 2005). These practices would be more effective if learners are taught how to improve their listening beyond the classroom (Goh, 2008). Learners need to be taught with a variety of metacognitive activities so that they can develop their knowledge about themselves as learners, knowledge about how listening works, and how to manage their comprehension (Vandergrift & Goh, 2012). This is called metacognitive instruction (Goh, 2008).

Metacognitive Instruction in English Language Teaching

Metacognitive instruction for L2 listening development is a process-based approach to teaching listening (Vandergrift & Goh, 2012) and it "elicits and enhances learners' knowledge about learning to listen, as well as helps learners use effective strategies for managing their comprehension and overall listening development" (Goh, 2008, p. 192).

Principles of metacognitive instruction

Through metacognitive instruction, learners can be supported to work on their listening without a teacher beyond the classroom after given the instruction in the classroom. The following principles are useful for planning effective metacognitive instruction as it can create a continuous cycle of learning (Veenman, et al., 2006, p. 9):

1. Embedding metacognitive instruction in the content matter to ensure connectivity
2. Informing learners about the usefulness of metacognitive activities to make them exert the initial extra effort
3. Prolonged training to guarantee the smooth and maintained application of metacognitive activity

Metacognitive activities

Goh (2008, pp. 199-200) suggests that we can design two kinds of learning activity based on these principles. These are (1) *integrated experiential listening tasks* and (2) *guided reflections on listening*. The first type of activity involves extraction of information and construction of meaning. Activities can be conducted using course books and materials. Tasks help learners become aware of various listening processes and their own self-concept as listeners. The second type of activity involves reflection and planning. Students are encouraged to reflect on their listening experiences and to plan for their own development to manage their own learning. Thus, both types of metacognitive activities can be used to develop learners' metacognitive knowledge and metacognitive skills.

To date, several investigators have examined the effectiveness of metacognitive instruction in listening classes. A small-scale metacognitive instruction study conducted by Goh and Taib (2006) suggested that weaker learners benefited the most from metacognitive instruction and they also found that such an instruction increased the participants' confidence.

Graham and Macaro (2008) compared three groups: two intervention groups (i.e., high scaffolding group, low scaffolding group) and one control group. They concluded that the training program improved listening proficiency and increased learners' confidence about listening. However, considering the fact that their control group received no intervention, it seems that their study received expected results (i.e., the intervention groups that received the strategy training improved their listening and increased their confidence about listening ability better than the other group that did not receive the training). Although controlled experimental studies like this can be useful, as Rost (2016) mentions, "it is often unethical to withhold a potentially beneficial treatment from some students for the sake of experimentation" (p. 250), even if the control group received the training afterwards.

Another metacognitive instruction conducted by Chen (2010) offered somewhat more convincing results although they seemed to be consistent with previous research findings (i.e., Goh & Taib, 2006; Graham & Macaro, 2008). The researcher compared two groups: one class with strategy training ($n = 35$) and the contrast group ($n = 36$) without the training. Both groups used the same textbook and listening materials. The only difference between the two groups was the training approach. No significant difference in listening proficiency results was reported. However, students in the treatment group self-rated that they became more self-regulated and became more motivated to study outside the class.

A different result was obtained in metacognitive instruction conducted by Vandergrift and Tafaghodtari (2010) in terms of listening proficiency. They compared two groups: the experimental group ($n = 59$) and the contrast group ($n = 47$). The contrast group listened to the same texts the same number of times without any guided attention to process. With respect to listening proficiency, the experimental group outperformed. They further compared more skilled learners and less skilled in the experimental group and verified that the less skilled listeners in the experimental group would make greater gains than the more skilled listeners.

A recent small-scale metacognitive instruction study conducted by Cross (2011) supports an overall metacognitive instruction view that less-skilled listeners make greater gains in listening comprehension. He compared two groups: less skilled listeners ($n = 4$) and more skilled ones ($n = 4$). The participants were adult high-level Japanese English learners. He concluded that only one of four more-skilled listeners improved from metacognitive instruction.

As the above literature review shows, it seems metacognitive instruction influences affective factors such as self-efficacy and motivation and performance positively. However, as reviewed above, there has been very little research conducted to examine the effect of metacognitive instruction by having a contrast group except for Chen's (2010) study and Vandergrift and Tafaghodtari's (2010) study and their results are not consistent in terms of listening proficiency. Therefore, there is a definite need for further research to investigate the effects of metacognitive instruction on listening comprehension and how it influences students' behavior and affect.

Objectives

This study investigated the effects of metacognitive instruction, having a contrast group. It examined how students changed their metacognition, self-efficacy, strategy use, and listening proficiency after undergoing metacognitive instruction in the listening class. The study guided the following three research questions:

1. Does metacognitive instruction improve students' listening proficiency?
2. How does metacognitive instruction influence students' metacognition, self-efficacy, strategy use, and listening proficiency?
3. Do learners with low listening proficiency in the experimental group show a greater improvement in listening proficiency than learners with high listening proficiency?

Method

Participants

The participants were university EFL students ($N = 48$) from six classes. Non-English-major EFL students were chosen because previous research (e.g., Sampson, 2016; Yashima, 2000) suggests that they are often not aware of why they need to improve their English and how to improve their English and those learners potentially benefit the most from metacognitive instruction.

The experimental group from three classes ($n = 26$) received metacognitive instruction in 2016 and the contrast group from three classes ($n = 22$) participated in the study in 2017 over a semester (see Table 1).

TABLE 1
Data Collection Period

Groups	Data Collection
Experimental Group	April to July in 2016
Contrast Group	April to July in 2017

In order to see that the participants were evenly distributed between the two groups, a *t*-test was conducted. Table 2 below shows the number of participants of each group, in addition to the mean and standard deviation of L2 listening proficiency for treatment and contrast groups and results of *t*-test. As can be seen in Table 2, the result of the *t*-test on pre-listening proficiency showed that there was no significant difference between the two groups ($t = -1.69$, $p = .10$, $r = .24$), which indicate that both groups

were evenly distributed as to their initial listening proficiency. According to Cohen's (1988) guidelines, *r* = .10 is a small effect size and *r* = .30 is a medium effect size. Judging from the small effect size, *r* = .24, we can safely conclude that the two groups' initial listening proficiency was similar. The initial listening proficiency was measured using practice test 1, which will be described later in detail.

TABLE 2
Results of t-test, Means, Standard Deviations for Pre-Listening Proficiency

	Experimental Group (*n* = 26)	Contrast Group (*n* = 22)	95% Confidence Interval of the Difference				
	M (SD)	*M (SD)*	*Lower*	*Upper*	*t*	*p*	*r*
Pre-Listening proficiency	42.7 (9.0)	47.6 (11.0)	-10.72	.92	-1.69	.10	.24

The same instructor taught both groups over a semester and collected the data. Both groups had similar characteristics: (a) they had a 90-minute English lesson once a week as elective courses; (b) they were all non-English majors, studying English as a foreign language; (c) their main aim for the course was to achieve higher scores on TOEIC®; (d) the English textbooks that they were using were *Longman Preparation Series for the TOEIC® Test* (Lougheed, 2012) and both groups listened to the same texts; and (e) the textbooks that they used were for improving students' proficiency in English and their test-taking skills for those students who aim to achieve TOEIC® test scores from 300 to 600. The textbooks included a CD-Rom, which contained answer key, complete audio MP3 files, and audio script to help students practice listening comprehension exercises. Completing listening and reading exercises were their main activities, but students were also provided grammatical explanations when checking answers.

Data Analysis

To obtain descriptive statistics, (a) the participants' pre- and post-listening and reading proficiency test grades and (b) their pre- and post-questionnaire answers were analyzed quantitatively using *t*-test and repeated measures ANOVA. In addition, students' interview data were analyzed qualitatively to understand results further. The following sections describe them in detail.

Tests

Listening and reading proficiency tests were measured using practice tests 1 and 2 from *Tactics for TOEIC® : Listening and Reading Test* (Trew, 2007). Practice test 1 was used for the pre-test and practice test 2 was used for the post-test. These tests contain official TOEIC test items authorized by Educational Testing Service (ETS), the makers of the TOEIC test. Around twenty test-developers check all test items and they make sure that the difficulty of them is appropriate for test-takers before they are used (Powers, 2010). Since the practice tests 1 and 2 were also authorized by ETS, it is said that the difficulty of these tests is carefully reviewed and the difficulty of these tests is the same. The listening section contained 100 items. The participants listened to short statements, short conversations, and talks and answered questions based on what they had heard. The listening test took approximately 45 minutes to complete. The reading section also contained 100 items. They read a variety of materials and responded at their own pace. The completion time for the reading test was 75 minutes. Cronbach's alpha obtained by SPSS 23.0 was .78 for practice test 1 (100 items) and .72 for practice test 2 (99 items). The result of the analysis of Cronbach's alpha displayed that the variance of one item from practice test 2 was close to zero and therefore it was excluded from the analysis. The Cronbach's alphas obtained can be said to be fairly reliable (Takeuchi & Mizumoto, 2014).

SRLL Questionnaire

Change in metacognition, self-efficacy, strategy use about listening was measured using the SRLLQ (the Self-Regulated Learning in Listening Questionnaire, Kobayashi, 2017a, see Appendix). This scale has been validated using structural equation modeling, proving to be both valid and reliable (Kobayashi, 2017a). The questionnaire consists of 18 items and assesses learners' self-efficacy, metacognition and strategy use in listening. It contains six factors: self-efficacy, regulation of cognition, knowledge of cognition, awareness of metacognition, cognitive strategies, and listening strategies. Each factor consists of three items. Self-efficacy measures students' self-efficacy in the listening class. Regulation of cognition measures metacognitive skills such as planning, monitoring, and evaluation. Knowledge of cognition measures metacognitive knowledge such as knowledge of one's cognition, knowledge of how to use the strategy, and knowledge of why and when to use the strategy. Awareness of metacognition measures the awareness of metacognitive knowledge and metacognitive activities. Cognitive strategies measure the use of cognitive strategies and listening strategies measure use of listening strategies. The scale takes the form of a 7-point Likert scale ranging from 1 = *not at all true of me* to 7 = *very true of me*. The higher the scores in the scale indicates the greater the self-regulated learning capacity in the listening class. Table 3 shows that the scale coefficients of each factor. The internal consistency reliability was .87 for Self-efficacy, .80 for Regulation of Cognition, .79 for Knowledge of Cognition, .76 for Cognitive Strategies, .65 for Listening Strategies, and .60 for Awareness. The result showed that the value of Awareness and Listening Strategies were relatively low, but more than the suggested threshold value of .50 and the other four measures were well within the satisfactory range (Takeuchi & Mizumoto, 2014). Taken together, these results indicate that the SRLLQ has good overall reliability.

TABLE 3
Internal Consistency Reliability of the Six Factors (N = 48)

Factors	α
Self-efficacy	.87
Knowledge of Cognition	.79
Regulation of Cognition	.80
Awareness	.60
Cognitive Strategies	.76
Listening Strategies	.65

The following students' data were excluded from analysis: (a) they had lived overseas for more than six months; (b) they had learned English at English conversation schools; (c) they had obtained high scores on TOEIC or EIKEN; (d) they were absent for pre- or post-listening tests; (e) they did not complete the questionnaire; and (f) they were juniors or seniors.

Data Collection and Procedure

To link the outcome of the participants' learning with their performance, their listening proficiency data were obtained. The listening test was administered at the beginning and at the end of the study. The SRLLQ was also administered at the beginning and the end of the study, immediately after the listening test. In the second week of the course, the pre-reading tests were conducted and in the third week, the pre-listening tests were administered. After the listening tests, the questionnaires were distributed and the instructor obtained the students' consent to use the data. Also, students from both groups were selected for semi-structured interviews to gain deeper understanding of quantitative results. In order to closely look at how and why metacognition influences affects and strategy use, semi-structured interviews were conducted, adopting a stimulated recall method (Gass & Mackey, 2000).

Three students (Student X, Student Y, and Student Z) from the experimental group participated in the interviews in July and August in 2016 and four students (Student A, Student B, Student C, and Student D) from the contrast group participated in the interviews in July in 2017. The interviewees (pseudo-initials) were carefully chosen based on these criteria: (1) their pre-linguistic knowledge resources (LKR) must be average because LKR affects strategic behavior and grades (Macaro, 2010). LKR contains: (a) Lexical-semantic knowledge, (b) Phonological-graphological knowledge, (c) Morpho-syntactic knowledge, and (d) Pragmatic knowledge; and (2) their pre-listening proficiency is also average so that results can be generalized for the target sample. Seven interviewees who met these criteria were selected. Their LKR was tested based on their vocabulary and grammar on the practice test 1. They participated in the interviews individually in a classroom after the intervention (after they took the post-listening test). They received explanation of the research outline and purpose and how the obtained data would be used (e.g., their responses would not affect their grades and confidentiality would be respected). All the participants signed a consent form before the data collection process began.

The interviews were conducted in Japanese, using their SRLLQ responses, asking their reasons for their choices and experiences. The researcher also asked their initial motivation towards learning English and how it changed over the semester and why, having them draw a line on a piece of paper so that their line could indicate their motivation level. For the students from the experimental group, their goal-setting and reflection sheets were also used for the interviews. Each session lasted approximately 20-35 minutes. All the interviews were recorded, transcribed verbatim, and highlighted for answering the hypotheses.

Data analysis was carried out as follows: First, the verbatim transcripts were read over and over again. Then, how the metacognitive instruction influenced students' performance (both inside and outside the classroom) was highlighted, comparing both the data (i.e., data from the experimental group and data from the contrast group): Characteristics of the two groups' changes were shown later in detail. Table 4 below illustrates brief descriptions (e.g., why they took the current course, motivation of English language learning) of the interviewees.

TABLE 4
Brief Descriptions of Interviewees

Groups	Students	Sex	Brief Descriptions
Contrast	A	F	Wanted to obtain an English qualification, did not like English
	B	F	Wanted to obtain an English qualification, had low confidence in English ability and low motivation
	C	F	Wanted to obtain an English qualification, low motivation
	D	F	Wanted to obtain an English qualification, liked English
Experimental	X	M	Neither liked nor disliked English
	Y	M	Had low confidence in English ability
	Z	F	Had low confidence in English ability

Brief Characteristics of Experimental Group Treatment

- The experimental group received metacognitive instruction. Each lesson was 90 minutes long and the students attended once a week. The author was in charge of the classes. The metacognitive instruction started in week three of the 15-week class. At the beginning of the course (the first week), the teacher explained the course, its aim and how the students would be evaluated. Then, the teacher had the students talk about their experiences over the spring break to get to know each other well. Next, the teacher explained the pre-listening and reading tests (procedure, time, tasks, etc.).
- They received knowledge of learning strategies for their listening development. Accordingly, they had a shorter time for being involved in answering listening comprehension questions in the classroom.
- They were encouraged to set goals for their own listening improvement both inside and outside the classroom and to reflect on.
- They used their course book as well as a 14-page booklet for metacognitive instruction. The booklet

was developed by Kobayashi (2012) for metacognitive instruction in the oral communication class. It was adapted for listening. Table 5 below gives an overview of the booklet.

TABLE 5
Contents of the Booklet for Metacognitive Instruction

Pages	Contents
1–2	Outline of metacognitive instruction and its objectives, evaluation, and outcomes
3–4	The objectives of eight sessions and listening strategies
5–6	Eight sessions to raise awareness as language learners and to develop self-regulatory strategies regarding listening
7–14	Goal-setting and reflection sheets

Overview of Metacognitive Instruction

● There were eight special sessions of metacognitive instruction (see Table 6), one per week. Each session lasted approximately 20 minutes and was conducted in Japanese. In sessions 1, 2, 3, 4, and 5, listening strategies were introduced as strategy knowledge in Japanese.

● Students engaged in goal-setting and reflection regularly for 8 weeks, using goal-setting and reflection sheets. They were encouraged to set personal goals in terms of how to improve their listening skills and to reflect on how they did well to achieve their goals regularly by sharing their reflections in the classroom with their peers and the teacher, giving each other advice.

The two types of metacognitive activities were adapted for the purpose of the study: (1) *integrated experiential listening tasks* and (2) *guided reflections on listening* (Goh, 2008). The researcher adapted the following key metacognitive processes provided for open-ended type of listening materials by Vandergrift and Goh (2012) into the research context (i.e., comprehension listening tasks):

● Planning (we, including the teacher and students, shared what kind of strategies we could use for the type of the task).
● Students answered the questions and shared their answers with their classmates. They reconstructed texts with their classmates orally.
● We checked the answers. We verified our comprehension together.

Thus, students were encouraged to predict and then compare what they understood with their predictions. Then, they were also encouraged to monitor, and evaluate their comprehension. They were also encouraged to reflect on whether the strategies were useful or not to increase their metacognitive knowledge (Vandergrift & Goh, 2012).

Brief Characteristics of Contrast Group Treatment

● The contrast group used the same textbook and listened to the same texts. Although they did not receive explicit metacognitive instruction, knowledge about test strategies were implicitly taught as the textbook contained such knowledge. Therefore, this test-taking strategy knowledge was introduced implicitly naturally when we went over the answers as well: (a) answer choices often contain words that sound similar to words for people, things, or activities in the photo or words in the statement/question, but they are not necessarily the correct answer (so you should avoid choosing them as correct answers); and (b) answer choices often repeat words that were used in the statement/question, but they are not necessarily the correct answer (so you should avoid choosing them).

● They did not engage in metacognitive activities such as planning, monitoring, and reflecting on their understanding during listening activities.
● They did not have the opportunity to discuss how to improve listening skills with their classmates and the teacher. Because they did not have the opportunity to share their goals (including study plans) and to discuss their learning strategies, they engaged in more listening exercises than the students in the experimental group. That is, they had a longer time for practicing listening comprehension questions in the classroom.

TABLE 6
Eight Sessions of Metacognitive Instruction

	Metacognitive Activities	Metacognitive knowledge and Cognitive Strategy Knowledge for listening	Listening Strategy Knowledge
1	Goal-setting	● Distributed the booklet ● Explained the importance of goal-setting, drawing a learning cycle of plan, do, and review (and plan) ● Explained that without goal-setting, they cannot evaluate themselves efficiently and effectively, and discussed objectives for metacognitive instruction, its outline, evaluation (after they set goals, they evaluate their own performance critically, etc.), and outcomes ● Encouraged students to listen to English songs and English materials to improve their listening skills	
2	Sharing the model of successful learners, Goal-setting and reflection	● Learning about learning. The teacher shared a successful learners' learning model to encourage students to reflect on their learning and to be inspired by their stories (Kobayashi, 2017b) ● Encouraged students to set specific goals regarding listening ● Explained the importance of memorizing pronunciation of new words and read them aloud	● Introduced a listening strategy (prediction) explicitly with metacognitive activities ● How to focus on listening
3	How listening works Sharing listening strategies	● Had students share their listening strategies ● Listening strategies introduced were reviewed briefly ● How to dictate (The teacher introduced dictation and explained the value of the activity and encouraged them repeating and shadowing)	● Focusing on the first few words of the speaker
4	Monitoring and reflection	● Listening strategies introduced were reviewed briefly ● Increasing the background knowledge	● Paying attention to speakers' stress and intonation while listening
5	How to make it (reading aloud activity) a habit	● Reviewed listening strategies introduced briefly	● Raised their awareness that they comprehend better when they know the topic or theme of listening
6	The importance of review Introducing Apps	● Explained the importance of review using Ebbinghaus's forgetting curve, interacting with the students ● Reviewed listening strategies introduced briefly	
7	Relationship between goal-setting and reflection	● Discussion session ● Had opportunities to share their reflection and were encouraged to give advice to classmates when their classmates could not achieve their goals	
8	Self-evaluation	● Discussion session ● Discussed how to continue to be autonomous learners	

Results

First, it was hypothesized that the group receiving the experimental treatment would outperform the contrast group on the posttest of listening comprehension. Second, it was hypothesized that the participants in the experimental group would demonstrate greater growth in metacognition, self-efficacy, strategy use, and listening proficiency than the participants in the contrast group. In addition, it was hypothesized that less skilled listeners in the experimental group would show a greater improvement in achievement than their more skilled counterparts.

Effect of Metacognitive Instruction on Listening Proficiency

First, the changes to (i.e., interaction effects of) listening proficiency between the treatment and contrast groups over time, from pre-test to post-test, were examined, using repeated measures ANOVA. Table 7 in the following page reports the levels of significance for F-ratios for the interaction effects of time by group, metacognition, self-efficacy, and strategy use of pre-test and post-test results for the two groups. It was found that there were significantly greater changes in listening proficiency and Regulation of Cognition for the treatment group than for the contrast group. According to Cohen's (1988) guidelines, $r = .10$ is a small effect size, $r = .30$ is a medium effect size, and $r = .50$ is a large effect. However, there were no significant differences in Knowledge of Cognition, Awareness of Metacognition, Self-efficacy, Cognitive Strategies, and Listening Strategies.

TABLE 7
Interaction Effects of Time x Group in SRLLQ of Pre-test and Post-test Results for Treatment and Contrast Groups

Factors	Time	Experimental (*n* = 26)		Contrast (*n* = 22)		Time x Group		
		M	*SD*	*M*	*SD*	*F*	*p*	*r*
Listening proficiency	Pre-test	42.7	9.03	47.6	11.01	4.852	.033	.91
	Post-test	55.2	6.45	54.4	9.64			
Knowledge of Cognition	Pre-test	2.72	1.03	2.86	1.61	.024	.877	.15
	Post-test	3.35	1.09	3.41	1.59			
Awareness of Metacognition	Pre-test	5.00	1.15	5.14	1.07	.025	.876	.16
	Post-test	5.21	1.02	5.39	1.03			
Regulation of Cognition	Pre-test	2.55	1.11	3.09	1.40	3.21	.080	.87
	Post-test	3.47	1.16	3.39	1.34			
Self-efficacy	Pre-test	2.79	.93	3.09	1.28	.445	.508	.56
	Post-test	3.28	.95	3.74	.97			
Cognitive Strategies	Pre-test	3.05	1.34	2.98	1.19	1.757	.192	.80
	Post-test	3.94	1.04	3.48	1.42			
Listening Strategies	Pre-test	3.83	1.18	3.52	1.47	.000	.989	.00
	Post-test	4.47	.99	4.15	1.31			

Note. *df* = 1.

In order to examine the last hypothesis, the participants in the experimental group were grouped, using a cluster analysis, based on their performance on the listening pretest (because it was measured by a TOEIC® Listening test, that is, a standardized listening test, it should be considered as their initial listening proficiency). The Ward method with the squared Euclidean distance technique was used in applying the cluster analysis to explore distinct characteristics of groups (Oshio, 2011).

Based on a dendogram, it was decided that the participants could be divided into three groups. This decision was supported by a one-way ANOVA, which revealed statistically significant differences for all the variables ($p < .001$). Figure 1 illustrates the cluster profiles of the three groups (i.e., pre-listening mean and post-listening mean). Table 8 shows results. of descriptive statistics of each cluster.
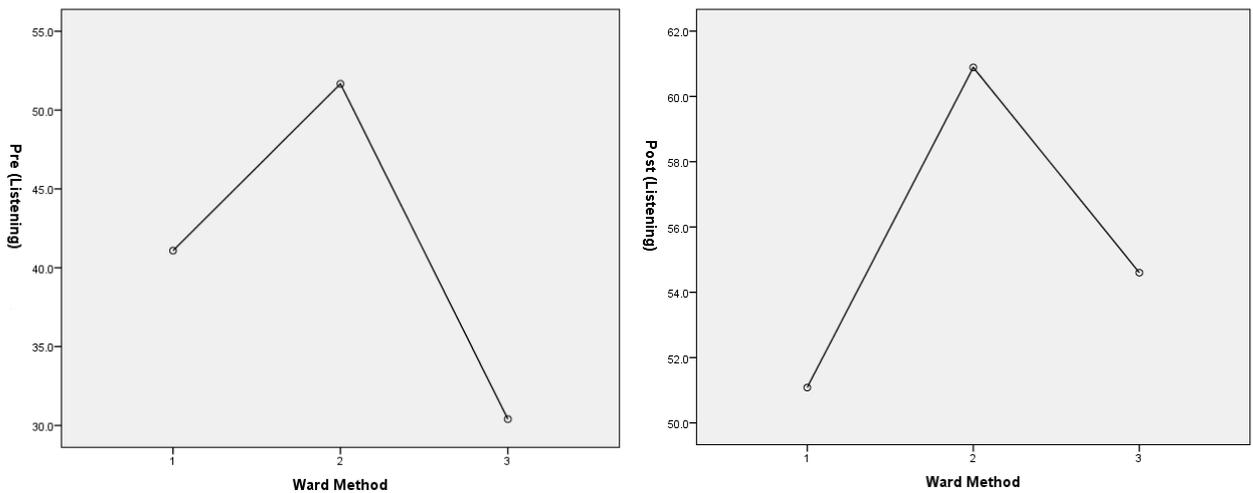
Figure 1. Visual representation of each cluster.

TABLE 8
Descriptions of Each Cluster

	Groups	*n*	*M*	*SD*
	1	12	41.08	2.88
Pre-listening	2	9	51.67	6.95
	3	5	30.40	2.88
	1	12	51.08	5.57
Post-listening	2	9	60.60	4.86
	3	5	54.60	1.95

The researcher compared the mean scores of the pre- and post-listening tests among the clusters, with the Bonferroni adjustment ($p <$. 05). It should be noted that the numbers of participants in all the clusters were small; and therefore, it would violate the assumption of parametric tests. Accordingly, a non-parametric test, that is, the Wilcoxon signed-rank test, was also conducted to double-check the results. However, this procedure yielded the same results ($z =$ -3.182, $p =$ .001, $r =$ -.85). According to Cohen's (1988) guidelines, the effect size $r =$ .50 can be considered a large effect.

As can be seen in Table 8 above, the learners belonging to Cluster 1 ($n = 12$) can be referred to as the "learners with medium proficiency" as their mean of listening proficiency lies just between those of Clusters 2 and 3. The learners in Cluster 2 ($n = 9$) were "learners with high proficiency". Compared with the other two groups, their mean of listening proficiency was higher. On the other hand, those in Cluster 3 ($n = 5$) were the "learners with low proficiency". Compared to the other two groups, their mean of listening proficiency was the lower. From these results, it was assumed that the three groups were different in terms of their listening proficiency at the beginning of the course.

Of the three clusters, the learners in Cluster 3 presented the greatest improvement in listening proficiency, which suggests that the learners with low proficiency (Cluster 3) benefited the most from the metacognitive instruction.

Data from stimulated recall interviews provided further insights into the development of their metacognition and indicated how they became more proactive learners compared to the participants from the contrast group. All the following excerpts were translated into English from Japanese by the author. The initial, I, represents the interviewer (i.e., author). The words in brackets in excerpts were added by the researcher for readability.

First, it was found that students from both groups learned how to listen better. It was somewhat surprising that almost all the students except for Student A from the contrast group also revealed a significant amount of metacognitive knowledge with a small amount of feedback from the teacher.

Although the contrast group was supposed not to receive feedback explicitly, it was difficult to avoid then. When the teacher and the students went over the answers, the teacher had to give feedback in terms of how to listen better once. Somewhat unexpectedly, however, that feedback had a considerable impact on them. One student from the contrast group commented:

(you said) don't forget the question/the first statement you hear, (you said) you can repeat the question/the statement you hear in your head. I did that. I'm not good at listening at all (...) but after I did that I could listen better, I could listen to words and could manage it in the rest. (Student B)

The students from the contrast group received feedback from the teacher once regarding the above strategy. Similarly, another student from the contrast group stated how she came to familiarize herself with listening strategies:

After I took this course, now I know a lot of things. There are some techniques as to how to answer questions, right? You shouldn't choose the words that sounded similar (because they are dummies). (Student C)

It should be noted again that all the participants in this current study used the same textbook and listened to the same texts. It seemed that even the students in the contrast group noticed these techniques through repeated similar listening comprehension exercises with some of the teacher's implicit feedback (e.g., when going over the answers, the teacher stated that similar sounding words in choices were often dummies). The textbook offered a considerable amount of this kind of practice: Students were advised not to choose similar sounding word choices because those choices were often not correct answers. Furthermore, the students in the contrast group engaged in more listening exercises than the students in the experimental group, which probably gave them the opportunity to practice their metacognition and also raised their awareness towards these techniques.

The most interesting finding is that, however, it became clear that all the participants from the contrast group did not do anything except for their assignments outside the classroom. By contrast, all the participants from the experimental group acknowledged the metacognitive instruction, gained metacognitive knowledge and used strategies, including metacognitive, cognitive, and listening strategies both inside and outside the classroom, valuing them. The following excerpts display how they used the listening techniques they were taught explicitly.

I: How about trying to pay attention to the first few words?
Y: Ah! that's, really, the point of your class, you were telling us, so I tried my best (to focus on the first few words), indeed.

All the students from the experimental group revealed their greater metacognition in terms of how they can learn better beyond the classroom. The following excerpts illustrate how they became more self-regulated learners outside the classroom after the intervention (their metacognitive awareness and how it was influenced from the instruction are underlined). For example, as can be seen in the following excerpt, Student X was using a book that was recommended by the instructor to improve listening. He was also using an app that was introduced from his peers for building up vocabulary.

I: What vocabulary book have you been using? Is this one?
X: No, that one,
I: The gold one?
X: (nodding) The gold one.
I: What made you buy that book?
X: Well, <u>you</u> (told us).

I: Ah, <u>the one I introduced in the class</u>.
X: Yes.

   Similarly, Student Y also mentioned:

I: A phone app? (...) When did you download it?
Y: Well, I downloaded it around May.
I: What made you download it? (...) because of your classmates?
Y: Yes, that's it. <u>I didn't know anything about until then. So, yes</u>.
I: You are keeping on doing that?
Y: <u>Ah, yes, as far as I can</u>.

Student Z also shared a similar experience:

I: What made you download that app?
Z: <u>Well, in the class, I heard that the app is good. (...)</u>
I: I see (laughs) How about reading aloud?
Z: I thought I should try it myself.
I: How often did you do it? (...)
Z: <u>I did every other day usually and sometimes I did every day</u>, and sometimes I became busy and then I did every other day about half an hour.
I: About 30 minutes? That's pretty long, isn't it?
Z: Yeah, in total. For the app for vocabulary, about 15 minutes (...) and I did other things such as reading and writing down.

   Like this, all the students from the experimental group demonstrated how they became more self-regulated learners beyond the classroom. In the following excerpt, Student Z described how she was coping to improve her listening beyond the classroom:

Z: Yeah, and I go to (the library) when I have time between classes and (...)
I: Well, then, you are studying for (listening), aren't you?
Z: <u>Yeah, I think I'm the one who is there (in the library) the most. (laughs) (...) I'm not good at listening, so I listed my weakness, I took notes (of my reflections), (for example) I couldn't listen to the beginning, depending on topics, I learned (there are techniques about listening), depending on topics, I'm not familiar with machine stuff (words related to machines), or I'm not familiar with unique (infrequent) words.</u>
I: Well, what made you decide to do that?
Z: Well, I thought it would improve my listening if I do so (...) jotting down my weaknesses, I thought I should prepare for those words (for that particular topic) and I did. (...) <u>I learned that there are dummy words, similar pronunciation words for wrong choices in this class</u>.
I: Ah, you also made notes for yourself (to overcome your weaknesses), depending on topics because?
Z: <u>Yeah, I did them all because I learned them through this class.</u>
I: I see, you did them beyond the class, indeed.
Z: <u>Yeah (laughs) I did </u>(laughs).

   Thus, all the participants from the experimental group expressed that they used a variety of strategies taught or shared in the class to improve their listening outside the class. As mentioned earlier, the researcher and learners from the experimental group shared their goals and strategies (i.e., what they do and how to improve their listening beyond the classroom to improve their listening) during the discussion time as a part of metacognitive instruction, which seemed to influence them positively. Also, it seemed

they were motivated to achieve their goals because they set their goals every week. The following excerpt seems to support this view:

> *I: (...) are there anything like this in other classes? setting goals, trying to achieve them, and reflecting on them?*
> *Z: No, for the first time.*
> *I: What do you think of it?*
> *Z: I think I would be motivated to do because I write this. If I had not written, because I wouldn't set goals by myself normally, I usually just do it depending on my mood, so (I wouldn't have done it), but if I set goals, I think I will try.*

These above findings are interesting because although students from the contrast group also demonstrated how they gained greater metacognitive knowledge and used skills inside the classroom, in terms of outside self-regulated behavior, no one in the contrast group did anything to improve their listening except for their assignment. This seems to show that the experimental group benefited better through the current explicit metacognitive instruction.

Discussion

This study investigated the effects of metacognitive instruction, having a contrast group. As we have seen in Table 2, the result of *t*-test on pre-listening proficiency has confirmed that there was no significant difference between the two groups. With regard to the first hypothesis, that after the intervention there would be significant difference in listening proficiency, the answer is "no". However, the students from the experimental group made the greater gains in listening proficiency after the intervention. These results seem to be consistent with Chen's (2010) study that found no significant differences in listening proficiency tests results. However, as we reviewed, in a study conducted by Vandergrift and Tafaghodtari (2010), the students in the experimental group outperformed the contrast group. A possible explanation for these somewhat contradictory results might depend on our different interventions and how we assessed their achievement. In Chen's (2010) study and the current study, the participants in all the groups were exposed to their listening proficiency test formats during the intervention. On the other hand, in Vandergrift and Tafaghodtari's (2010) study, the participants in both experimental and contrast groups were not used to the final listening proficiency test format. Instead, they received a pedagogical cycle of guided practice through tasks where students predicted what they were going to listen to, took notes during listening, reflected after listening, shared their notes with their peers or the instructor, and revised their notes. As Vandergrift and Tafaghodtari suggested, it seems that the experimental group learned how to listen from such an approach and outperformed the counter group even in the final unfamiliar test format. In contrast, the participants from the contrast groups in both Chen's (2010) and the current study answered a large number of comprehension questions in a similar final listening test format over the semester. It seems some participants who were more motivated to study English in their contrast groups also learned how to listen and how to take a listening proficiency test better gradually with an instructor's implicit instruction. The instruction in the contrast group in this study was not explicit. Nevertheless, whenever we went over the answers, the instructor gave feedback implicitly.

With regard to the second hypothesis, that participants in the experimental group would demonstrate greater growth in metacognition (Knowledge of Cognition, Awareness of Metacognition, and Regulation of Cognition), self-efficacy, and strategy use (Cognitive Strategies, Listening Strategies) than participants in the contrast group, the results are mixed. Although the participants in the experimental group showed greater development in Regulation of Cognition in listening, there were no significant differences in other factors: Awareness of Metacognition, Knowledge of Cognition, Cognitive Strategies, and Listening Strategies. However, both groups gained growth in metacognition and the result that, the students from

the experimental group displayed greater development in Regulation of Cognition than the students from the contrast group, indicates that the students in the experimental group became more capable of setting goals, monitoring, and evaluating, which is in agreement with previous research findings (e.g., Chen, 2010; Vandergrift & Tafaghodtari, 2010). Data from the stimulated recall protocols provided deeper insights. The interviewees from the experimental group were all motivated to study outside the classroom and studied regularly. They were also motivated to continue their English learning after the semester. They also demonstrated their greater metacognition (e.g., they were highly aware of how they used their strategies, including metacognitive strategies and listening strategies to comprehend better inside the class and valued them). Considering the fact that the students from both groups shared the same goal, that is to improve listening skills and obtain higher scores on a TOEIC® listening test before the intervention, the finding is encouraging.

In terms of how the participants in the experimental group would become more proactive, compared to the participants in the control group outside the group, data from the stimulated recall protocols further supported the result. We have observed that all the learners in the experimental group had been engaging in their learning activities not only inside but also outside the classroom beyond their assignment, using self-regulatory strategies after the intervention.

Regarding the third hypothesis, that the learners with low proficiency in the experimental group would show a greater improvement in achievement than the students with high proficiency, the answer is "yes". Previous research (e.g., Goh & Taib, 2006; Vandergrift & Tafaghodtari, 2010) explains that the less skilled listeners often do not transfer their L1 listening skills to the L2 and therefore, they benefit more from such a guided practice. Likewise, the EFL learners with low listening proficiency in the experimental group in the current study benefited the most from the current metacognitive instruction. The interview data have indicated that the students became more familiar with L2 listening skills and strategies and utilized them both inside and outside the classroom.

Conclusion

This study has explored the effectiveness of the metacognitive instruction in listening with Japanese EFL learners. From the results, first, it may well be concluded that the present study has demonstrated the effectiveness of metacognitive instruction. Comparisons between the experimental and contrast groups have revealed that the learners from the experimental group made greater gains than those from the contrast group in listening proficiency and Regulation of Cognition. Second, the finding, that the learners with low proficiency from the experimental group marked greatest gains in listening proficiency, has suggested that metacognitive instruction is the most effective for the weak listeners. Third, the follow-up qualitative analyses have displayed that metacognitive instruction could increase learners' metacognition and motivation so that learners can become more autonomous learners outside the classroom. These results corroborate the past findings related to metacognitive instruction, which reported that metacognitive instruction leads to greater metacognition, self-efficacy, and strategy use, and outcome (e.g., Kobayashi, 2016).

Lastly, limitations need to be considered. First, this study investigated the effectiveness of metacognitive instruction having a contrast group; however, it was not possible to examine the long-term effects of the instruction on learners as the current study was conducted within a relatively short period of time (i.e., over a semester). Therefore, investigating the long-term effect would be useful. Second, because the present study was conducted in real classroom settings, as shown, there was an occasion that the teacher had to give feedback to the contrast group when a student asked. If it had not occurred, the results of this study might have been different given the fact that that feedback had an impact on them. Finally, the results of this study do not necessarily apply to other age groups. The participants of this study were university EFL learners. Considering the result that listeners with low proficiency would

benefit the most from metacognitive instruction, it would be important to examine the effectiveness of metacognitive instruction on younger listeners for further study.

Acknowledgements

The Author

Ayako Kobayashi is a full-time instructor in the Institute for Language and Culture of Konan University in Japan. Her current research interests cover learner autonomy and metacognitive instruction in EFL classrooms. Her most recent publication includes a contribution to the *Journal of the Institute for Language and Culture* (2018).

Email address: ayako@center.konan-u.ac.jp

References

Chen, A. (2010). Effects of listening strategy training for EFL adult listeners. *The Journal of ASIA TEFL, 7*(1), 135–169.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.* Newbury Park, CA: Sage.

Cross, J. (2011). Metacognitive instruction for helping less-skilled listeners. *ELT Journal*, *65*(4), 408–416.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive development enquiry. *American Psychologist, 34,* 906–911.

Gao, X., & Zhang, L. J. (2011). Joining forces for synergy: Agency and metacognition as interrelated theoretical perspectives on learner autonomy. In G. Murray, X. Gao, & T. Lamb (Eds.), *Identity, motivation, and autonomy in language learning* (pp. 25–41). Bristol, UK: Multilingual Matters.

Gass, S. M., & Mackey, A. (2000). *Stimulated recall methodology in second language research.* Mahwah, NJ: Lawrence Erlbaum.

Goh, C. (2008). Metacognitive instruction for second language listening development: Theory, practice and research implications. *RELC Journal, 39*(2), 188–213.

Goh, C., & Taib, Y. (2006). Metacognitive instruction in listening for young learners. *ELT Journal, 60*(3), 222–232.

Graham, S., & Macaro, E. (2008). Strategy instruction in listening for lower-intermediate learners of French. *Language Learning, 58*(4), 747–783.

Holec, A. (1979). *Autonomy and foreign language learning.* Oxford, UK: Pergamon.

Kobayashi, A. (2012). OC no jyugyo ni okeru metaninchi shido ga nihonjin daigakusei ni ataeru eikyo: jiritsushita gakushusha no ikusei ni mukete [The impact of metacognitive instruction on Japanese university students in oral communication classrooms: promoting learner autonomy]. *STEP BULLETIN, 24*, 23–41.

Kobayashi, A. (2014). OC no jyugyo ni okeru metaninchi shido ga nihonjin daigakusei eigo gakushusha ni ataeru eikyo: jiritsusei no ikusei wo mezashite [The impact of metacognitive instruction on EFL

learners in EFL classrooms: promoting learner autonomy]. *Language Education & Technology, 51,* 81–110.

Kobayashi, A. (2016). Examining a metacognitive instruction model. *The Journal of Asia TEFL, 13*(2)*,* 117–137.

Kobayashi, A. (2017a). The development and validation of the self-regulated learning in listening questionnaire. *The Journal of the Institute for Language and Culture, 20,*163–184

Kobayashi, A. (2017b). Nihonjin daigakusei ha TOEIC® no gakushu ni torikumu nakade donoyona keiken wo sitanoka [Exploring Japanese university students' TOEIC® learning experiences]. *JACET Kansai Journal, 19,* 77–96.

Lougheed, L. (2012). *Longman preparation series for the TOEIC ® test (Intermediate course): Listening and reading.* New York, NY: Pearson Education, Inc.

Macaro, E. (2010). The relationship between strategic behavior and language learning success. In E. Macaro (Ed.), *The continuum companion to second language acquisition* (pp. 268–299). New York, NY: Continuum International Publishing Group.

O'Malley, J. M., Chamot, A. U., & Kupper, L. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics, 10*, 418–437.

Oshio, A. (2011). *SPSS to AMOS ni yoru shinri chosa data kaiseki* [Data analysis, utilizing SPSS and AMOS]. (2nd ed.). Tokyo, Japan: Tokyoshoten.

Ozeki, N. (2006). Gakushu strategy wo shido sureba seito ga kawaru [Strategy instruction can change students]. In Daigakueigokyoikugakkai gakushu strategy kenkyukai (Ed.), *Eigo kyoshi no tameno 'gakushu strategy' handbook* ['Learning strategy' handbook for English teachers] (pp. 15-22). Tokyo, Japan: Taishukanshoten.

Powers, D. E. (2010). Validity: What does it mean for the TOEIC® Tests? *ETS Research Report, TOEIC Compendium, 1–11.*

Rost, M. (2016). *Teaching and researching listening.* (3rd ed.). New York, NY: Routledge.

Sampson, R. J. (2016). *Complexity in classroom foreign language learning motivation: A practitioner perspective from Japan.* Bristol, UK: Multilingual Matters.

Schraw, G., Crippen, K. J., & Hartley, K. (2006). Promoting self-regulation in science education: Metacognition as part of a broader perspective on learning. *Research in Science Education, 36*, 111–139.

Takeuchi, O. (2010). Gakushusha no kenkyu kara wakaru koto: Kobetsu kara togo he [What we have learned from language learner research: From an individualistic perspective to a holistic one]. In H. Kojima, N. Ozeki., & T. Hiromori (Eds.), *Seichosuru gakushusha: Gakushusha yoin to jiritsu gakushu* [Learner development in English education: Learner factors and autonomous learning] (pp. 3–20). Tokyo, Japan: Taishushokanten.

Takeuchi, O., & Mizumoto, A. (Eds.). (2014). *Gaikokugo kyoiku kenkyu handbook* [The handbook of research in foreign language learning and teaching]. Tokyo, Japan: Shohakusha.

Trew, G. (2007). *Tactics for TOEIC® : Listening and reading test.* Oxford, UK: Oxford University Press.

Vandergrift, L. (2003). Orchestrating strategy use: Toward a model of the skilled second language listener. *Language Learning, 53*(3), 463–496.

Vandergrift, L. (2004). Listening to learn or learning to listen? *Annual Review of Applied Linguistics, 24*, 3–25.

Vandergrift, L. (2005). Relationships among motivation orientation, metacognitive awareness and proficiency in L2 listening. *Applied Linguistics, 26*, 70–89.

Vandergrift, L., & Goh, C. (2012). *Teaching and learning second language listening: Metacognition in action.* New York, NY: Routledge.

Vandergrift, L., & Tafaghodtari, M. H. (2010). Teaching L2 learners how to listen does make a difference: An empirical study. *Language Learning, 60*, 470–497.

Veenman, M. V. J., Van Hout-Wolters, B. H. A. M., Afflerbach, P. (2006). Metacognition and learning: conceptual and methodological considerations. *Metacognition Learning, 1*, 3–14.

Yashima, T. (2000). Orientations and motivation in foreign language learning: A study of Japanese college students. *JACET Bulletin, 31*, 121–133.

Zimmerman, B. J. (1986). Becoming a self-regulated learner: Which are the key subprocesses? *Contemporary Educational Psychology, 11*, 307–313.

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal, 45*(1), 166–183.

Zull, J. E. (2011). *From brain to mind: Using neuroscience to guide change in education.* Richmond, Virginia: Stylus.

Appendix

The Self-Regulated Learning in Listening Questionnaire (SRLLQ) items (translated from Japanese into English) (Kobayashi, 2017a)

Note. These are presented below each part (i.e., Part1–Part4) in the original questionnaire:
1 = (0–10%)   2 = (10–20%)   3 = (20–40%)   4 = (40–60%)   5 = (60–80%)   6 = (80–90%)   7 = (90–100%)
1 = (*Not at all true of me*)   7 = (*Very true of me*)

Part 1: Self-efficacy items

1.	I feel I can obtain satisfactory grades in the listening class.	1	2	3	4	5	6	7
2.	I feel I can understand basic contents taught in the listening class.	1	2	3	4	5	6	7
3.	I feel I can do well on assignments and tests in the listening class.	1	2	3	4	5	6	7

Part 2: Knowledge of Cognition items

1.	With respect to listening, I can evaluate my own learning progress.	1	2	3	4	5	6	7
2.	With respect to listening, I have a clear goal when I use learning strategies.	1	2	3	4	5	6	7
3.	When I study for listening, I am aware of what strategies I use.	1	2	3	4	5	6	7

Part 3: Awareness of Metacognition and Regulation of Cognition items

1.	With respect to listening learning, I think it important to know my strengths and weaknesses as a learner.	1	2	3	4	5	6	7
2.	With respect to listening learning, I think it important to know what learning strategies are most effective and when to use them effectively.	1	2	3	4	5	6	7
3.	During listening tasks, I think it important to monitor (check) how well I am listening to.	1	2	3	4	5	6	7
4.	To improve my listening ability (skills), I try to set my own goals.	1	2	3	4	5	6	7
5.	I try to ask myself regularly whether my learning progress serves goals I set for myself.	1	2	3	4	5	6	7
6.	After I finish the task in the listening class, I try to evaluate my performance.	1	2	3	4	5	6	7

Part 4: Strategic Behavior items

1.	To improve my listening ability (skills), I listen to foreign music and English learning materials.	1	2	3	4	5	6	7
2.	To improve my listening ability (skills), I read words and expressions aloud over and over again and memorize them.	1	2	3	4	5	6	7
3.	To improve my listening ability (skills), I write down what I hear.	1	2	3	4	5	6	7
4.	While listening, I pay attention to a speaker's stress and intonation in order to comprehend well.	1	2	3	4	5	6	7
5.	While listening, I focus on a speaker's first few words in order to comprehend well.	1	2	3	4	5	6	7
6.	When listening, I comprehend better when I know something about the topic/theme on listening tasks.	1	2	3	4	5	6	7