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Improvement of Listening Comprehension Skills through Shadowing with Difficult Materials

Yo Hamada
Akita University, Japan

This study challenged the widely accepted theory that shadowing is most effective when using easier materials. This is experiment-based research with 73 learners in total. To examine if difficult materials can improve learners' listening comprehension skills, two experiments were conducted. The first study investigated whether learners' listening comprehension skills would improve by shadowing with difficult high school materials and what aspects of listening comprehension skills they would improve by the shadowing training. 44 Japanese first year high school students participated in the first study. 13 lessons were taught using a high level English textbook from a Japanese publisher, *Crown I*. The second study used authentic difficult materials to support the result of the first study and examine the effectiveness of difficult materials from a different perspective. 29 high school third year students participated in the second study and practiced 17 sets of passages in *Obama speech collection*. Furthermore, potential problems of shadowing were analyzed qualitatively. The results suggest that shadowing with difficult textbooks can improve students' listening comprehension skills, and the problems the students have in listening after short-term shadowing training are addressed.

Key words: shadowing, listening comprehension skills, i +1, i-1

Shadowing has attracted language teachers' attention in Japan for its effectiveness in improving students' listening comprehension. Shadowing

originated several decades ago as a training method for interpreters who must learn to listen and speak simultaneously (Lambert, 1988). However, it has been used for more than a decade in language education and has especially been gaining attention in recent years (Kurata, 2007) as a means to improve students' communicative language skill, especially listening and speaking skills (Mochizuki, 2006). Shadowing has been shown to be effective in teaching EFL and in teaching Japanese to exchange students. Japan is pioneering research on shadowing and of its effectiveness and little has been reported on this issue in other countries.

This study includes both quantitative and qualitative perspectives, and approaches shadowing with two experimental studies and distribution of an open-ended questionnaire. The experiments were conducted to examine the effectiveness of difficult materials on shadowing; the other is to explore potential problems that could suggest the limitation of short-term shadowing training.

What is Shadowing?

According to Lambert's (1992) definition, shadowing is a paced, auditory tracking task with *parrot style,* using headphones and devised as a means of studying selective attention and practicing for simultaneous interpretation. However, Lambert's definition lacks a critical concept of shadowing from the perspective of cognitive processes. Shadowing should not be regarded as just repetition of phonetics, but rather as an active and a highly cognitive activity. In shadowing, learners track the heard speech and vocalize it as clearly as possible while simultaneously listening (Tamai, 1997). This process of repeating incoming speech and monitoring the shadowed material engages many areas of the learners' brains, especially the language centers (Kadota, 2007).

Shadowing benefits students in the following ways (Tamai, 1992b). First, the bottom-up processing at the micro level is activated and helps the learner to reconstruct the original speech. Second, the bottom-up processing helps more information to be passed on for macro level analysis, activating top-

down processing. Third, echoic memory, "which stores the information one hears for a short period," (Kadota, 2007, p. 255) is activated to retain incoming sound information more accurately. Fourth, the learner's storage capacity for incoming information is increased, which provides more time for processing data.

There are several varieties of shadowing. In the most common, *complete shadowing*, in which listeners try to shadow everything. *Selective shadowing* involves listeners selecting only certain words and phrases to shadow. *Interactive shadowing* is a combination of *selective shadowing* and a small conversation (Murphey, 2001).

Research of Shadowing in Classroom

Since shadowing bases its framework on the cognitive processes of learners, its effectiveness for improving listening comprehension skills should not be limited only to English learning but learning other languages.

In the Japanese as a Foreign Language education context, shadowing has been researched to make a listening-based curriculum for schools. Mochizuki (2006) studied 50 university exchange students who were learning Japanese and practiced shadowing. Mochizuki reported that 49 out of 50 participants agreed on the effectiveness of shadowing training, suggesting learners share this positive opinion of shadowing. Toda and Liu's (2007) small study with five Korean university students found that materials for shadowing training should be read at a natural speed and contain natural pauses. From these studies, shadowing is considered to be effective not only for English language learners but also for the acquisition of other languages as well.

In the English as a Foreign Language education context, the effectiveness of shadowing has been researchers' focus. Tamai (1992a) compared shadowing with dictation in a three and a half month study with 47 university students. While the shadowing group showed a statistically significant improvement on listening comprehension tests, the dictation group did not. Shadowing was shown to improve students' listening skills faster than

dictation in the short term.

Shadowing is also considered to assist lower level learners. Tamai (2005a) observed two groups of 45 students: one shadowing group, and one dictation group. He divided each group of 45 students into three different proficiency levels based on the listening section of a SLEP test. After 13 lessons, the results of the post-test showed that among the shadowing groups, the low and the middle groups improved statistically, while the high level group did not.

Suzuki (2007) investigated when shadowing is most effective during classroom instruction by using a high school textbook. In a five day study, Suzuki divided 112 participants into three groups: shadowing training at the beginning of the class (group A), shadowing training at the end of the class (group B), and a control group. Within each group, the learners were divided into three proficiency levels. The results showed the higher proficiency learners of group A improved statistically. The lower learners of group B showed statistically significant differences. Suzuki's study is of importance because it shows a way to use high school textbooks authorized by MEXT (Ministry of Education, Culture, Sports, Science & Technology) for shadowing.

Shiki, Mori, Kadota, and Yoshida (2010) examined the relationship between *repeating and shadowing*, and *vocabulary and the number of trials*. Their study investigated two sets of 24 students; one group for repeating, the other for shadowing. Both groups showed a ceiling effect after 4 or 5 trials. Shadowing training, which involves on-line processing, was more effective at enabling students to successfully reproduce content words. In *off-line* processing, listeners access the meanings of the incoming sounds. *Off-line* processing involves various cognitive activities in the phonological loop and in the long-term memory. In *on-line* processing, listeners have less time to access the meanings. *On-line* processing involves fewer cognitive activities than *off-line* processing because listeners rehearse the sounds as soon as they hear them (Kadota, 2007).

These studies reaffirm the effectiveness of shadowing on listening comprehension. Furthermore, examination of what type of questions students

can become better at answering should tell what skills the learners can improve through shadowing. This will enable teachers to know when and how to use shadowing more effectively.

Limitations and Problems

Most research reports shadowing use in classrooms but few describe how *shadowing* should be used during instruction. In addition, the materials with *i-1* or below are considered to be appropriate (Tamai, 2005b), and difficult materials at *i+1* are not recommended. (*i* is the current learner's proficiency level, *i+1* is the slightly higher level and *i-1* is the slightly lower level.) Texts for shadowing ideally should contain no more than two or three unknown words per 100 words (Kadota, 2007). Toda and Liu (2007) also propose that materials for shadowing trainings be read at a natural pace.

Under the current Japanese English education situation, at least two types of materials could be considered difficult for these purposes. One is the high level textbooks designed for entrance examinations or other certifying examinations. The other one is authentic materials which are not designed for language learners. Since widely used high school textbooks are considered difficult (Hasegawa, Chujo, & Nishigaki, 2008), most Japanese high school textbooks are not suitable for shadowing, since the recommendation is to use easier materials for shadowing. This case should apply to TOEFL preparation materials as well for the same reason. In addition, authentic materials, defined by Richards and Rodgers (2001) as readings similar to those used in native language instruction such as newspaper or magazine articles and other media, are recommended for use in teaching contexts, despite some criticism, because of their motivating influence on L2 learners. Unfortunately, adhering to the recommendation that shadowing only be practiced with i-l level texts rules out the use of most authentic materials. Thus, it would be worthwhile to explore whether there is an effective way to use these materials for shadowing activities.

Third, though shadowing's effectiveness at listening comprehension skills

has been reported, it has not reported which specific types of comprehension skills listeners improve. Additionally, despite the explained theoretical benefits and the positive aspects reported, both learners who improve their listening comprehension skills and those who do not might still experience potential problems. In order to develop a more effective procedure for shadowing, those problems should be explored.

Research Question

To overcome the limitations above for the advancement of shadowing procedure in the future, the aim of this study is to investigate the following three questions. (1) Can students' listening comprehension skills improve by shadowing with difficult texts? (2) What kind of listening skills can students improve through the shadowing training? (3) What are the potential problems students have after short-term shadowing practice?

METHODS

Experiment I

Participants

44 (13 male, 31 female) Japanese high school first-year students were investigated. Students were divided into an experimental group (7 males, 16 females, referred hereafter to group A) and a control group (6 males, 15 females, referred hereafter to group B). Most students' English proficiency is near the national average for Japanese high school students according to a practice examination, *Shinken-moshi*, by *Benesse. Benesse* was founded in 1955 and *Shinken-moshi* is one of the most reliable practice examinations, which has been measuring high school learners' academic skills since 1973. The proficiency of group A and group B were measured and found not to

differ significantly by means of a two-way analysis of variance (ANOVA). The main effect of *group* did not show a statistically significant difference ($F(1,42)=.013$, p=n.s.), and no interaction effect between *groups* and *question types* was observed ($F(2,84)=.019$, p=n.s.).

Materials

An English textbook, *Crown I*, authorized by the Ministry of Education, was used in this study. Crown series textbooks are highly likely to be adopted and used by advanced high schools in Japan (Hasegawa et al., 2008). The number of types and tokens that appeared in Crown series is in the top 3 out of 35 English textbooks (Chujo, Yoshimori, Hasegawa, Nishigaki, & Yamazaki, 2007). Judging from the participants' English proficiency level and the textbook description, this textbook is considered difficult for the participants.

The listening section of three different types of questions from STEP Eiken 3rd grade of 2005 was used for pre-and post- tests (the June version for the pre-test; the October version for the post-test). The STEP Eiken test is one of the most reliable English tests, which emerged in 1963. 2,300,000 people take the tests every year. It is designed to measure English proficiency levels and the 3rd grade is designed for graduates of junior high school (Eiken, 2011). The questions fall into three different categories: Q1-10 contains 3 sentences with fewer than 10 words each, in which students listened to a dialogue accompanied by an illustration and chose the correct response to the last sentence (visual aid-assisted simple listening comprehension); Q11-20 contain 4 sentences with fewer than 10 words each, in which students listened to a dialogue and chose the correct answer to a comprehension question for 10-15 seconds (short passage listening comprehension); and Q21-30 contains longer sentences and passages, and 3-5 sentences each with up to 15 words, in which students listened to longer passages and chose a correct answer to a comprehension question (long passage listening comprehension). The examples are shown in Appendix A. Both the June

version and the October version follow this pattern of questioning, which made it possible to asses which types of skills were more or less affected by the shadowing training.

Procedure

Thirteen 50-minute classes were conducted in this experiment. During the first 25-30 minutes, the teacher explained the passages in the textbook and used activities for comprehension; during the remainder of the class, shadowing training was conducted based on the instructions recommended in Kadota and Tamai (2004). The students in group A were required to 1) listen to passages while trying to understand the passage's overall meaning, 2) practice *mumbling* once or twice, in which they softly shadowed the incoming sounds, 3) practice *parallel reading*, in which the learners shadow while reading the text of the passages, 4) check their understanding of the written texts silently, 5) practice shadowing three times, 6) check the written texts for sounds the learners could not hear or shadow and meanings they could not understand, 7) practice *contents shadowing*, in which they concentrated on both shadowing and interpreting the meaning of the passage. In each lesson, learners studied one or two passages consisting of approximately 10 lines (See Appendix B). The students in group B were given a similar lesson using the same textbook, but without shadowing training exercises and instead with several repeating activities.

The learners took the pre- and post-tests that each required about 25 minutes to complete.

Analysis

To measure the effectiveness of the shadowing training, a two-way analysis of variance (ANOVA) with both *question types* and *time* as the within-subject factors was performed on the data of group A and group B. Paired-sample t-tests were performed as post-hoc analysis to measure which

type of questions the students improve their scores on. To avoid type 1 error, the α level was controlled by Bonferroni adjustment.

Results

The descriptive statistics for the experimental group (Group A) are shown in Table 1 and those for the control group (Group B) are shown in Table 2. The two-way ANOVA for group A and B show statistically significant differences for the main effect of *time*, and the interaction effect of the *time* and *question types* (Table 3 and Table 4). This means that both groups improved but the improvement can be dependent on the question types. Three t-tests were performed as post-hoc analyses in order to investigate which question type was affected by the training. With a Bonferroni adjustment, the α level was set at .017 for each t-test. Both group A and B showed statistically significant improvement on questions 1-10, which tested visual aid-assisted simple listening comprehension. Group A showed a statistically significant improvement on questions 11-20, which tested short passage listening comprehension, while group B did not. Neither group showed statistically significant improvement on questions 21-30, which tested long passage listening comprehension. The effect size of group A for Questions 1-10 and Questions11-20 is high, (r=.74, .53 respectively), and that of group B for Questions 1-10 is high as well (r=.73), which shows the high reliability of the data statistically.

TABLE 1
Descriptive Statistics for Group A (Experimental Group)

Material	Mean	SD	Min	Max
Pre Q1-10	6.57	1.53	3	9
Post Q1-10	8.30	1.30	6	10
Pre Q11-20	7.39	1.67	3	10
Post Q11-20	8.13	1.46	4	10
Pre Q21-30	7.96	1.46	4	10
Post Q21-30	7.96	2.18	3	10

TABLE 2
Descriptive Statistics for Group B (Control Group)

Material	Mean	SD	Min	Max
Pre Q1-10	6.48	1.78	3	10
Post Q1-10	8.38	1.69	4	10
Pre Q11-20	7.24	2.12	3	10
Post Q11-20	7.90	2.07	3	10
Pre Q21-30	7.76	2.36	3	10
Post Q21-30	8.00	1.73	5	10

TABLE 3
Results of Two-way ANOVA

Group	Main Effect of Time	Main Effect of Question Types	Interaction Effect
A	F(1,22)=11.87 *p* =.002**	F(1,21)=1.71 *p*=.215	F(2,66)=5.35 *p*=.013**
B	F(1,20)=17.16 *p*=.001**	F(1,19)=.723 *p*=.498	F(1,19)=6.82 *p*=.006**

** $p<.001$

TABLE 4
Results of T-tests

Group	df	Question 1-10	Question 11-20	Question 21-30
A	22	t=5.208 *p*=.000**, *r*=.74	t=2.919 *p*=.008**, *r*=.53	t=.000 *p*=1.000, *r*=.00
B	20	t=4.740 *p*=.000**, *r*=.73	t=2.552 *p*=.019, *r*=.50	t=.295 *p*=.771, *r*=.07

**$p<.017$

Experiment II

The results of experiment I suggest that using difficult high school materials can improve students' listening skills with regard to short passages. Experiment II attempts to examine if difficult authentic materials can also lead to the same results, identify what led to the results, and discover potential problems.

Participants

29 Japanese high school third-grade students (9 males, 20 females, referred to hereafter as Group C) participated in this study. Their English proficiency level is above the national average, according to the results of the *Benesse* test. Since experiment I has already shown the better results of shadowing training with difficult materials than the non-shadowing group, experiment II does not have a control group for an educational reason.

Materials

Following Kadota and Tamai's (2004) recommendation to use materials students are interested in, *Obama Speech Collection* (Appendix C) was chosen for the students of group C. All the speeches were delivered by the President of the United States of America to native speakers, the speeches are considered beyond the participants' English proficiency level. The listening section of STEP Eiken 2rd grade of 2005 was used for their pre- and post-tests (the June version for the pre-test; the October version for the post-test). The tests consist of two parts. (Q1-15 and Q16-30) Analyzing students' improvements on the two parts, it was possible to measure what kind of skills shadowing training effectively improves. In Questions 1-15, students listened to a conversation for approximately 20-25 seconds, and chose a correct answer from four choices. In Questions 16-30, students listened to longer passages for approximately 25-30 seconds, and chose the correct answer from four choices (See Appendix D). An open-ended questionnaire was also created to explore thoughts and opinions about shadowing lessons. Students wrote freely about how much they thought they improved and what problems they still had.

Procedure

The students practiced 17 sets of passages for three weeks over eight 50-

minute classes. Each lesson was devoted only to shadowing training; two sets of passages were used in each lesson. The instructions for shadowing followed the same procedure as stated in Experiment I. The open-ended questionnaire was administered after completion of all 17 training sessions.

Analysis

The data were analyzed following the same method as in Experiment I: a two-way ANOVA and paired-sample t-tests. The students' comments were analyzed borrowing from Brown' (1998) principle on qualitative data analysis, data reduction, data display, and conclusion drawing and verification. The data were first divided based on who responded, improved students or non-improved students. Then, the comments were further divided into positive responses and negative responses, and summarized by topic: *sounds, meaning, general,* and *others.* Although the primary purpose was to identify the problems, positive responses were also described for the sake of further development of an effective procedure for shadowing.

Results

The descriptive statistics for group C are shown in Table 5. The two-way ANOVA for group C shows a statistically significant difference for the main effect of *time* ($F(1, 28)= 6.84$, $p=.014$), and for the main effect of *question types* ($F(1, 28)= 33.44$, $p=.003$). The analysis did not show the interaction effect of the *time* and the *question types* ($F(1, 28) =1.05$, $p=.32$). This means that their score on the listening test improved after the training, and that the improvement depends on *question types*. Two paired sample t-tests were performed as post-hoc analysis to measure students' improvement on each question type ($\alpha=.025$). While Questions 1-15 show a statistically significant difference, $t(28)=2.415$, $p=.023$, $r=.42$, Questions 16-30 did not, $t (28) =1.296$, $p=.206$, $r=.24$. The effect size of the data for Questions 1-15 is medium ($r=.42$), which is considered relatively reliable. The students appear

only to have improved their shorter passage listening comprehension. The results of the questionnaire are summarized in Table 6 and Table 7.

TABLE 5
Descriptive Statistics for Group C

Material	Mean	SD	Min	Max
Pre Q1-15	9.03	2.85	4	15
Post Q1-15	10.24	2.50	6	14
Pre Q16-30	7.41	2.91	2	12
Post Q16-30	7.97	2.58	3	13

TABLE 6
Questionnaire Results of Students' Positive Response

Area	Improved Students	Non-improved Students
Sounds	Able to listen more clearly (10)	Able to listen to function words such as *a* and *the* Able to listen to longer sentences Able to listen more clearly (4) Able to listen to more sentences
Meaning	Able to understand the meaning (2) Meaning comes naturally	
General	Get used to speed Able to listen, relaxed Felt it more slowly (3) Able to listen better (6)	Able to listen better (2) Felt it more slowly
Others	Improve the score	Able to take notes

TABLE 7
Questionnaire Results of Students' Negative Response

Area	Improved Students	Non-improved Students
Sounds	Cannot catch questions More than two words sometimes sound as if they were one word Focus on only individual word	Too fast questions
Meaning	Cannot associate meanings with sounds(3)	Cannot associate meanings with sounds (3) Cannot understand the situation or contents
General	Cannot put up with the situation change Cannot understand for the first listening	

	Cannot listen and answer questions smoothly Cannot understand while listening Cannot summarize what happens in head	
Others	Cannot choose the correct answer (5) Cannot choose the correct answer, despite understanding the content Lack of concentration Cannot increase the score Don't know some words (2) Cannot take notes	Lack of concentration (2) Cannot choose the correct answer (2) Cannot increase the score

DISCUSSION

Effectiveness of Shadowing with Difficult Materials

These experiments show that shadowing with difficult materials can improve students' listening comprehension skills for shorter passages.

The results in experiment I show that both experiment and non-experiment lessons were effective on Questions 1-10 and only the shadowing training was effective on improving the score of Q11-20. In Q11-20, students had to answer a comprehension question without any visual aid for approximately 10-15 seconds. Since Q11-20 do not have pictures like Q1-10 do, learners cannot guess the answer based upon visual cues, and must rely on the heard speech. Unless learners successfully identify the incoming speech, they cannot choose a correct answer. This result suggests group A learned to identify the incoming sounds and to access their meanings more successfully than group B. The results of experiment II are similar to those of experiment I in this respect. According to the results of experiment II, Group C showed a statistical improvement on Questions 1-15, which means the students improved their ability to recognize incoming sounds and relate those sounds with their proper meanings when listening to shorter conversation. These results reflect one of the benefits of shadowing is that it reinforces the skill to

identify incoming sounds.

However, in experiment I, neither group A nor group B improved on Q21-30, in which the students must listen and temporarily store more information than in Q1-20. Although the students of group A became better at identifying the heard speech and relating the speech with its meaning more successfully than before, identifying the sounds is not enough to comprehend longer conversations. Likewise, the students in experiment II did not improve on Questions 16-30, which consist of longer passages. It is speculated that they still lack the capacity to hold larger amounts of phonemic input in short-term memory and need to expand the memory span.

Human cognitive processes can explain how recognition of phonemics proceeds to comprehension. As a model of human memory, Atkinson and Shiffrin (1968) proposed a concept of sensory memory, short-term memory, and long-term memory. Baddely (1986) further proposed a theory that working memory, previously called short-term memory, has functions of both storage and processing. Kadota (2007) summarizes how shadowing is involved in the memory process from the point of language acquisition theory: (1) automate phonological coding, (2) rehearse the coded phonology more effectively, (3) increase of the holding capacity of phonemic input in short-term memory, (4) make more effective memorization of vocabulary, chunks, and grammar. One of the purposes of shadowing training is to automatize phonological coding. Identifying the sounds the students listen to on their own is essential for automation. The results of these experiments suggest most students who experienced the shadowing training are passing through step (1) to (3) above. As explained in Tamai (1992b), shadowing training benefits students by increasing the capacity to store the incoming information, but a longer period of practice is necessary to improve students' listening comprehension skills for longer passages.

The results of the two groups reaffirm that shadowing is effective in developing the automation of phonological coding, step (1). This development should help the students overcome common listening problems. By asking 198 high school students, Inaga (2003) describes common listening

problems: the issue of recognition of phonemics and adjustment to sound changes, and the issue of speed. Shadowing can help the students deal with these problems, which should lead to an increase in their self-efficacy, the confidence to complete given tasks successfully (Matsunuma, 2006). Even those who did not improve scores commented that they felt there was some improvement in their ability to identify the sounds (Table 6). This feeling of improvement also increases self-efficacy.

Students' Problems

The results of the qualitative analysis reveal two major problems. First, even though the students can identify the sounds they hear, some of them still have difficulty connecting the sounds to meanings. Kadota (2007) theorizes that once the identification of sounds has become automatic through shadowing practice, learners can understand the meanings as well. Thus, this problem might result from inadequate practice. In other words, this may be the limit of short-term shadowing practice with difficult materials. Second, they still have difficulty in choosing the correct answers on a test. The first problem might cause the second problem because if the leaners fail to comprehend the conversation, the learners will naturally fail to choose the correct answer. On the other hand, if some learners understand the conversation but still have difficulty in answering, it is not directly related to the issue of shadowing process. They would need better test-taking strategies.

The first common problem of connecting sounds to meanings leads students to facing difficulty in understanding the content. Three students from group C who did not improve acknowledged that they were unable to comprehend meanings. Another student commented that the amount of sounds he could identify increased, but he became left behind because he spent too much time on accessing meanings of the words he heard. Cognitively, the listening process consists of perception and comprehension. Comprehension has five processes: lexical, syntactic, semantic, contextual, and schematic processes, which can compensate for inadequate perception

(Kadota, 2007). These students might have to develop each type of processing in order to create synergic benefits for comprehension. Penny (2005) also recommends that students listen and select key information, and advocates the need for more student exposure to natural native speech.

The second common problem leads students to fail to achieve higher scores on listening comprehension tests. Eight students, including students who improved and those who did not, reported that they felt they could listen more clearly than before but they still could not choose the correct answers. The students may be having trouble with relating sounds and meanings, not achieving comprehension as pointed out above. It may also be the case that many students' reading speed is too slow to process the questions and choices. For the automation of written lexical access, students need a rapid phonological code. Shadowing practice with a longer period will help students to relate grapheme and phoneme smoothly and rapidly. This will lead to more rapid lower level processing (Kadota, 2007).

Participants also commented on the issue of concentration. Three students, including a student who improved her score, reported that they cannot concentrate intensively for 25 minutes. One suggestion to help these students should be to teach *listening strategies*. Listening strategies are defined as "conscious plans to manage incoming speech, particularly when the listener knows that he or she must compensate for incomplete input or partial understanding" (Rost, 2001, p. 236). Especially by using *self-management strategy,* a metacognitive strategy, students can motivate themselves to listen (Rost, 2001). Another suggestion is to revise the shadowing procedure or the materials so that the students are not as taxed cognitively by the shadowing. When the students feel that too much is required of them for the practice, they will likely feel stressed and not be able to concentrate for long periods of time.

Limitations and Steps for Future Research

First, although this research shows that difficult texts are also effective in

developing students' listening comprehension skills, it cannot yet determine the optimal text level for shadowing practice. Experimenting shadowing with three different difficulty levels, such as *i*-1, *i*, *i*+1, should be an interesting topic. Second, since this is an experiment-based study and the number of the participants is limited, a further study should be conducted to affirm the findings of this research. Last, although the materials used in the studies were assumed to be difficult, supported by other researchers' studies, controlling the difficulty as done in an experimental laboratory was impossible due to the nature of the English teaching situation. However, a smaller class size is recommended for effective language teaching and controlling all the factors for research is not ideal for educational reasons. We teachers must focus on students' most effective language acquisition and we are required to produce the best effectiveness under the limited circumstances (Yamamori, 2004).

CONCLUSION

Although groups A and C used more difficult materials than recommended for their proficiency level, both groups showed statistical improvements in the tests. This result suggests that shadowing with difficult texts can also develop students' listening comprehension skills, especially the skill to identify the sounds they are listening to. To develop more effective bottom-up processing, this skill is crucial. This research raised the possibility that teachers can train students even using difficult texts, such as school textbooks and authentic materials.

Many students appear to be satisfied with their improved listening skills. For example, 14 students reported that they can listen to sounds more clearly, and four students felt the speed of passages was slower than before. Also, a student commented that he now can relax while listening. He has probably gained confidence in identifying sounds, and increased his listening self-efficacy. If students' self-efficacy improves, their motivation can also increase (Bandura, 1993). Another notable comment is that a student learned

to listen to function words more. Since shadowing is considered to be an on-line process, shadowing practice is more beneficial in helping students identify function words than repeating-based exercises.

Although research on shadowing shows its effectiveness on the majority of students, the issue of individual differences has not been sufficiently addressed. Even though the same material is used, the degree of improvement still varies from leaner to leaner. To make shadowing more widely applicable, researching such factors as students' psychological status and motivation with shadowing training may be helpful. This study hopes to contribute more to shadowing's application in the classroom and outside as well and to help more students improve their listening skills.

THE AUTHOR

Yo Hamada is an assistant professor in the Center for Promotion of Educational Research and Affairs of Akita University in Japan. His current research interests cover listening comprehension (including listening strategies) and demotivation. He has published several articles on each area. He has taught English at a junior and senior high school, and is teaching at a university now.
Email: yhamada@gipc.akita-u.ac.jp

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APPENDIX A
Script of Sample Questions from Eiken 3rd Grade. (Eiken, 2010a)

Q1-10. Are you ready, Janet?
Not yet.
What's the problem?
1. I'm not tired.
2. I don't know that restaurant.
3. I can't find my bag.

Q11-20. I didn't see you at the volleyball game on Saturday, Jim.
I was at my brother's wedding, Diane.
Really? How was it?
It was wonderful.
Question: Where was Jim on Saturday?

Q21-30. Last summer, I traveled around Greece for one month. I didn't use buses, cars, or trains to travel. I went everywhere by bike. It was hard, but I had fun.
Question: How did the man travel around Greece?

APPENDIX B
Sample Passages from Crown I. (Sanseido, p.23)

Lesson 2-1

I went to America for the first time when I was sixteen. Nowadays many young people go abroad; things have changed a lot since I was a boy. To me, America was a strange, far-away land. However, I had a dream to cross the ocean by ship and to hitchhike across America.

In high school, I got part-time jobs to save money. My father became interested in my plan and gave me money for the trip. It was a difficult decision for my father. For one thing, he was an office worker and it was a

large amount of money for him. For another, people would tell him not to allow his son to go on such an adventure. Foreign lands were so far away for us in those days; how could a boy ever hope to make it home safely?

APPENDIX C

Obama Sample Speech (Asahi Press, 2008, p. 22)

Thank you. Thank you so much. Thank you so much, Than you. Thank you. Thank you, Dick Durbin. You make us all proud. On behalf of the great state of Illinois, crossroads of a nation, Land of Lincoln, let me express my deepest gratitude for the privilege of addressing this convention. Tonight is a particular honor for me because, let's face it, my presence on this stage is pretty unlikely. My father was a foreign student, born and raised in a small village in Kanya. He grew up herding goats, went to school in a tin-roof shack. His father-my grandfather- was a cook, a domestic servant to the British. But my grandfather had larger dreams for his son. Through hard work and perseverance my father got a scholarship to study in a magical place, America, that shone as a beacon of freedom and opportunity to so many who had come before.

APPENDIX D

Script of Sample Questions from Eiken 2nd Grade. (Eiken, 2010b)

Q1-15. Hmm. It looks like the restaurant has changed its menu.
You're right. Some of the dishes are different.
Oh, no. The grilled chicken isn't here anymore. You know, the one that I always have, with the delicious sauce.
Oh, that's too bad. I know how much you liked it.
Question: What is the woman's problem?

Q16-30. Attention, students. Sometime today, you will hear the fire alarm.

At that time, everyone must go outside into the schoolyard. If you are playing sports outside, do not come back into the school building. Please take this fire drill seriously. It is important that everyone knows what to do in the event of a real fire, so follow your teachers' instructions carefully.
Question: What will happen today at the school?