

A Chronological Overview of Research on the Effect of Shadowing on Listening Ability: From 1988 to 2007

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1. Background of the Study

In 2020, it is well-established among English teachers and learners that shadowing is an effective activity to improve English ability. Many English training books featuring shadowing have been published that emphasize its effects on developing listening ability. Research on the shadowing effect began in the late 1980s (e.g., Yashima, 1988), but it was not until the 2000s that shadowing gained recognition as a useful listening activity.

The 2000s was a decade of dramatic shifts in the policy of English education in Japan. In 2003, the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) launched *The National Action Plan to Cultivate “Japanese With English Abilities”* (MEXT, 2003). As part of this plan, the MEXT initiated a project called SELHi (Super English Language High School) and provided a budget to more than one hundred high schools, both public and private, to support their new English curriculum through 2009.¹ The action plan also had an impact on the university examination system; the listening test was introduced into the National Center Test in January 2006. The new Courses of Study (i.e., the national

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educational guidelines) for elementary school (MEXT, 2008a) and middle school (MEXT, 2008b) were announced in 2008. At that time foreign language activity (gaikokugo katsudou) was incorporated into the curricula for the fifth and sixth grades as a new subject. Furthermore, the new Course of Study for high school announced in 2009 (MEXT, 2009) required teachers to use English as the instructional language.

With these changes, there was increased interest in how to foster students' communicative abilities in English, and shadowing started to gain wider recognition among English teachers. In fact, we can find many practical reports in English education magazines published in the early 2000s (e.g., Takei, 2002; Oshima, 2003; Kougo & Kubono, 2004), describing how to introduce shadowing activities into class lessons. Textbooks aimed at learners were also published. Tamai and Kadota (2004) wrote a listening training book that featured shadowing as an effective activity. Tamai later published a series of training books and is acknowledged as a foremost expert on shadowing.

Research on shadowing also flourished in the 2000s. As will be explained in a later section, Tamai carried out extensive research on the effect of shadowing on listening ability from a psycholinguistic view, which was compiled in his 2005 book (Tamai, 2005). This book, while no longer in print, still has a considerable impact on the current research on shadowing. Another significant landmark that promoted research on shadowing was the publication of *The Science of Shadowing and Oral Reading* (Kadota, 2007). In this book, Kadota provided an elaborate and comprehensive explanation of why shadowing is effective based on findings from psycholinguistic research. This book is continually revised and is perceived as a bible by those interested in the research of shadowing.

Without a doubt, Tamai's and Kadota's works made the biggest

contributions to the development of psycholinguistic research on shadowing; I am one of those who were inspired by them (Oki, 2010; O'ki, 2011, 2012, 2014; O'ki & Izumi, 2015). However, as stated earlier, the history of shadowing research began in the 1980s. This paper attempts to provide a chronological overview of research on the effect of shadowing on listening ability that appeared by 2007, when Kadota's book was published. Although there are many practical reports that do not present the statistical data, this study dealt with only empirical studies that employed statistical analyses based on objective tests. For each study, the purpose, method, and results are outlined.

2. Literature Review

2.1 Yashima (1988)

Purpose. As far as I researched, Yashima is the first researcher who reported whether there was an improvement in listening ability after training using shadowing.²

Method. Participants were 16 college female students taking a training course to be an interpreter, held twice a week for two months. In each class, the participants implemented a 10-minute shadowing practice. They were also encouraged to work on shadowing outside the class and keep a journal. To investigate the effect of this training, Yashima administered pre- and posttests, in each of which the participants took three kinds of tests: a shadowing test, TOEFL listening test, and dictation test. In the shadowing test, the participants shadowed the same passage in both pre- and posttests about marriage in Japan (about 300 words in length). Their voice was recorded on a tape, and the words they were able to reproduce were counted.

Results. Statistical analyses revealed that, whereas the reproduction

rate in shadowing showed a remarkable and significant improvement, the listening ability measured by TOEFL tests did not make significant progress.³ She also found that shadowing scores had strong and significant correlations with the TOEFL listening test ($r = .82$) and with the JACET hearing test ($r = .89$) and concluded that learners shadowing skills reflect their listening ability. As limitations, Yashima states that she needed a control group for comparison and participants of a larger sample size because there were only nine participants depending on the test.

2.2 Tamai (1992)

Purpose. The purpose was to compare the effects of “follow-up” (i.e., shadowing) and dictation on the improvement of listening ability. He also examined the relationship between follow-up skill and listening ability.

Method. Participants were 94 high school students who belonged to an English course. They were assigned to either the follow-up group ($n = 47$) or the dictation group ($n = 47$), and both groups received listening instruction that lasted for three and a half months (13 lessons in total). In each lesson, the participants worked on various activities in 50 minutes, including (1) listening for meaning, (2) parallel reading, and (3) vocabulary check. However, most of the class time was spent on follow-up/dictation, in which they reflected on how much their perception was accurate by comparing their production to the script. Before and after this instruction session, both groups took listening tests called the SLEP (Second Level English Proficiency Test), whereas only the follow-up group took a follow-up test.

Results. *T* tests revealed that, although the two groups demonstrated an equal performance on SLEP in the pretest, the gap reached a significant level in the posttest, indicating that only the follow-up group improved

their listening ability. He concluded that follow-up is an effective listening activity, while dictation may have needed a longer period to exhibit an effect. Tamai also found that the correlation between the follow-up skill and the SLEP score was weak ($r = .28$); thus, he hypothesized that follow-up improves learners' "listening strategy" rather than their general listening ability.⁴

2.3 Yanagihara (1995)

Purpose. Yanagihara also examined the effects of shadowing and dictation on the improvement of listening ability.

Method. The participants of her study were 90 freshmen in a private junior college in Japan. They were equally divided into three training groups (i.e., shadowing group and dictation group as experimental groups, and listening comprehension group as a control group) with homogeneous listening ability and were engaged in a 35-minute training session every week for two months (eight lessons in total). In the posttest, she used two kinds of materials: (1) materials with linguistic items taught in the training session and (2) materials without those items.

Results. It was found that the shadowing group outperformed the other two groups in the posttest, regardless of whether they had learned the materials in the training session. The dictation group also obtained better scores than the control group, but the difference was not significant when the materials were unfamiliar to them.

She also analyzed whether the effectiveness of each training varied depending on the learner's listening ability at the beginning. The posttest revealed that shadowing was more effective for lower-level learners than for upper-level learners, whereas this interaction was not observed for the dictation group. Yanagihara speculated that this was because

the participants had been repeatedly exposed to auditory stimuli during shadowing than dictation. Interestingly, the lower-level learners could not enjoy this effect when unfamiliar linguistic items were used in the posttest. Yanagihara stated that the level of materials used in the training was more appropriate for lower-level learners and claimed that the teacher should select the shadowing materials carefully. Yanagihara added that the shadowing group responded to the questionnaire more positively than the dictation group, suggesting that shadowing often has a better influence on learner motivation.

2.4 Tamai (1997)

Purpose. In his previous study (Tamai, 1992), Tamai assumed that follow-up (i.e., shadowing) can improve listening ability with less training compared to dictation. To test this hypothesis, he conducted a short-term experiment.

Method. Participants were 25 college juniors and seniors majoring in English literature. They joined a five-day listening training session (each day was 90 minutes), in which they worked on shadowing intensively. Before and after this training session, they took a TOEFL listening test and a shadowing skill test.

Results. A *t* test revealed that there was significant improvement in the TOEFL listening test after the training. This result corroborates the hypothesis that short-term shadowing can contribute to better listening ability. Learners with low-level listening ability demonstrated greater improvement. Moreover, the shadowing skill test performance also improved significantly, but the correlation with the two tests was not high (approximately .40). From these findings, Tamai estimated that the role of shadowing may be to enhance the phonological analytic skill rather than

the general listening ability.⁵

2.5 Sato and Nakamura (1998)

Purposes. The purpose of this study was twofold. One of them was to confirm the effect of shadowing on the improvement of listening ability. The other was to evaluate shadowing based on learners' affective aspects.

Method. Participants were 131 university freshmen. Based on the results of a JACET listening test, they were divided into two groups with equivalent listening ability (i.e., an experimental group, $n = 56$; or a control group, $n = 75$). Only the experimental group participated in training, in which they underwent such activities as (1) oral drills of reduced forms, (2) dictation of the reduced forms, (3) task-based listening activity, (4) parallel reading, and (5) shadowing. In contrast, the control group experienced only (3). After one year, the participants took another form of the JACET listening test and responded to a questionnaire.

Results. The analyses showed that although statistical analyses were not conducted, both groups improved their scores in the posttest. However, a t test revealed that the two groups performed comparably in the posttest, suggesting that shadowing was not more effective than the task-based listening activity.

To investigate the role of proficiency level, Sato and Nakamura divided the participants into three proficiency groups based on their pretest scores. They found that the low-level learners in the experimental group showed the most remarkable improvement, concluding that shadowing is more effective for low-level learners than for the other proficiency levels. The questionnaire also revealed that the learners appreciated the effectiveness of shadowing in improving their speech perception skills. However, to make shadowing more effective, Sato and Nakamura advised that learners

should be given a clear explanation of how shadowing can contribute to the improvement of listening ability.

2.6 Tamai (2005)

In his book published in 2005,⁶ Tamai introduces four shadowing experiments. The first two experiments are his 1997 study (Tamai, 1997) and the reanalysis of his 1992 study (see Note 4). In these experiments, he found the following: (1) shadowing is more effective than dictation in that learners can enjoy the effect with a short period of training; (2) shadowing is more useful for low-level learners who are yet to develop an efficient listening strategy; and (3) being skillful in shadowing does not necessarily mean being proficient in listening comprehension because the correlation between the tests measuring these two abilities was often low. The remaining two experiments, which will be described below, were intended to uncover the psychological mechanisms behind these findings.

(1) Experiment 1 (pp. 56-73)

Purpose. Tamai's previous experiments made him interested in the role of working memory for efficient listening and then in whether shadowing can elevate its function. This experiment aimed to compare the effects of shadowing and dictation while focusing on the improvement of learners' working memory.

Method. Participants were 93 freshmen studying at a junior college and were classified into three learning groups. The shadowing group ($n = 30$) and dictation group ($n = 32$) studied listening through the following procedure: (1) listening for meaning, (2) parallel reading, (3) vocabulary check, (4) shadowing/dictation, and (5) recording (i.e., checking the recorded voice or the transcribed note). In each lesson, they spent 30

minutes on this training, and the lesson was held every week for three months (i.e., 10 lessons in total). On the other hand, the control group ($n = 31$) was not given any instruction, but only took the pre- and posttests.

In the pre- and posttests, the participants took the same SLEP listening test as in other tests such as the SLEP reading test, articulation rate test (in Japanese and English), number memory test (in Japanese and English), and difficult vocabulary repetition test (e.g., *claus-tro-pho-bi-a*, *po-di-a-trist*, and *pro-cras-ti-na-tion*). The last three tests were intended to measure the efficacy of working memory.

Results. Analyses revealed that both experimental groups demonstrated significant improvement in their listening ability. The control group failed to do so even though their average score was the highest in the pretest (but with no significant difference). In addition, in the difficult vocabulary repetition test, both experimental groups significantly improved their scores. Tamai interpreted these results as indicating that both shadowing and dictation can help improve the listening ability, probably because these tasks elevated the function of working memory called rehearsal (i.e., maintaining the aural input in memory by repeating it). Tamai stated that this was accomplished overtly in shadowing and covertly in dictation.

(2) Experiment 2 (pp. 73-88)

Purpose. The previous experiment revealed the effect of shadowing and dictation on listening ability. In the second experiment, Tamai focused on the instant effect of shadowing and investigated whether learners can enjoy the same effect even when they underwent a much shorter period of training (i.e., not a few months but only five days).

Method. Participants were 51 university students, who were divided into two homogeneous groups in terms of their listening ability. The

experimental group ($n = 25$) received a 30-minute intensive shadowing training for five days (one lesson each day) following the same procedure as the first experiment, while the control group ($n = 26$) received no listening instruction. The tests were repeated three times (i.e., before the training, on the third day, and after the training) to measure the improvement of participants' listening ability, vocabulary knowledge, sentence repetition skill, number memory span in English, and articulation rate.

Results. The listening test revealed that only the shadowing group significantly improved their listening ability across all the tests.⁷ The shadowing group also outperformed the control group in the tests aimed at measuring sentence repetition skill and articulation rate, showing remarkable improvement between the first and second tests. In addition, Tamai performed a multiple regression analysis to examine how much the listening test score could be predicted by the other tests. As a result, it was found that all tests except the vocabulary test can contribute to the prediction. From these results, Tamai concluded that, through short-term shadowing training, learners can elevate the efficacy of their working memory, but they can hardly increase their linguistic knowledge.

2.7 Tateuchi (2005)

Purposes. This study was conducted for two purposes. One of them was to compare the effect of listening instruction using shadowing with that using general comprehension activities. The other was to reveal whether learners could reproduce more words as a result of shadowing practice.

Method. Participants were 77 freshmen at a national university taking an English course that was offered for 10 weeks (12 lessons in total). The

experimental group consisted of 28 students who studied listening mainly through shadowing. The control group consisted of the remaining 45 students, who were engaged in general comprehension activities (e.g., true-or-false questions and paragraph listening). They took the same listening test called CELT listening as pre- and posttests. Only the experimental group took a shadowing test before and after the instruction to calculate how many words they were able to reproduce.

Results. Although the pretest showed no significant difference between the two groups, the posttest revealed that the experimental group obtained significantly higher scores than the control group. Moreover, all participants in the experimental group were able to reproduce more words in the shadowing test than they did before training, with their mean reproduction rate going up from 70.6% to 90.8%. However, the correlation between the listening test and the shadowing test was as low as .26.

2.8 Suzuki (2007)

By carrying out two studies, Suzuki attempted to examine the effect of shadowing while focusing on the following variables: (1) the length of training, (2) the timing to incorporate shadowing (i.e., before or after studying the material), and (3) learner's proficiency level. She also compared its effectiveness with that of other activities, such as read-and-look-up and repetition. Due to these many variables, it is difficult to provide a coherent explanation of the miscellaneous results, as summarized in Table 1 at the end of this section.

(1) Practical Study 1

Purposes. There were two purposes for this practical study. First, to examine whether the length of training would have an influence on the

effect of shadowing, Suzuki offered two kinds of courses to high school students and compared the results. One of them was an intensive course held for five straight days, while the other was a long-term course held routinely for three months (16-18 lessons in total). Second, she also tried to reveal when a teacher should incorporate shadowing into class, that is, before or after studying the material.

Method. In both courses, participants practiced listening through one of three methods: (a) shadowing before studying the material ($n = 5, 40$), (b) shadowing after studying the material ($n = 6, 35$), and (c) no shadowing ($n = 16, 37$). Suzuki employed G-TEC listening tests to measure the improvement in listening ability.

Results. The study yielded mixed results across the two courses. In the five-day course, participants who learned through (a) and (c) demonstrated significant improvement, whereas those who took (b) did not. On the other hand, in the three-month course, only those who learned through (c) improved their listening ability.

Using the data of students who took the three-month course, Suzuki analyzed the influence of proficiency level⁸ and found that the effectiveness of each activity varied depending on the proficiency level. While the upper-level students who learned through (a) and (c) improved their listening ability, the lower-level students only benefitted from (b). For the middle-level students, none of the activities were effective.

(2) Practical Study 2

Purpose. The purpose of this study was to compare the effect of shadowing with that of other activities, such as read-and-look-up and repetition. Suzuki assumed these activities to be similar because all of them are considered to promote the function of subvocal rehearsal (i.e., repeating

the input in mind to store it in working memory).

Method. Participants were 114 high school students, most of whom took the three-month course in the first study. They took another three-month training in the fall (the first study was held in the spring) after being assigned to one of the three groups: read-and-look-up group ($n = 36$), shadowing group ($n = 38$), and repetition group ($n = 40$). To measure the improvement of their listening ability, a STEP listening test of the second grade was administered before and after the instruction.

Results. Analyses revealed that none of the three groups showed significant improvement. However, when taking the proficiency level into account, it turned out that the upper-level students significantly improved their listening ability through repetition, while the middle-level students improved through shadowing (after studying the material). Suzuki considered read-and-look-up to be the most challenging task because learners must phonologically encode the written text before they reproduce it. In contrast, repetition, where the input is provided orally by the teacher, required learners to only repeat it. For this reason, repetition is less challenging compared to read-and-look-up, enabling only the upper-level students to manage this activity.

Table 1

Summary of Reanalysis of the Data Obtained in Practical Studies 1 & 2

	Practical Study 1			Practical Study 2		
	(a)	(b)	(c)	R & L	Shadowing	Repetition
Upper	Yes	-	Yes	-	-	Yes
Middle	-	-	-	-	Yes	-
Lower	-	Yes	-	-	-	-

Note. (a) = shadowing before studying the material, (b) = shadowing after studying the material, and (c) = no shadowing; R & L = read-and-look-up.

3. Summary

The results of the studies mentioned above are summarized in Table 2. Three things should be noted. First, shadowing is generally effective for improving listening ability. This is evidenced by the result that the shadowing group demonstrated significant improvement in many of the studies. Several studies have compared shadowing with other tasks such as dictation and comprehension activities, but the results are somewhat miscellaneous.

Second, as suggested by Tamai (1997, 2005) and Suzuki's studies, shadowing can exhibit the effect of training for several days. Tamai theorized that this was because shadowing enhanced learners' working memory, which plays a crucial role in decoding the input. Decoding is a fundamental subskill of listening comprehension, so its development may appear early, in advance of the development of listening ability. With the exception of Tamai's (2005) experiments, there is little evidence to support this hypothesis. The fact that correlations between the shadowing test and the listening test tended to be weak could be indirect evidence because the low correlation indicates that the shadowing skill and the listening ability may not develop in parallel.⁹

Third, the effectiveness of shadowing may be affected by the learner's proficiency level or the difficulty of the training material. Three studies (i.e., Yanagihara, 1995; Tamai, 1997; Sato & Nakamura, 1998) yielded the finding that shadowing was more beneficial for lower-level learners. On the other hand, mixed results were observed in Suzuki's (2007) study. That is, the low- and middle-level group students learned best by shadowing the materials they had already studied, whereas the upper-level students were able to manage the new materials. Inherently, the two variables are associated with each other for the reason that whether a learner considers

a material to be difficult is determined by his/her proficiency level. In order to provide learners with shadowing materials of an appropriate level, teachers must evaluate the level of their learners precisely or establish an environment where learners can choose their own materials matching their level, such as CALL.

Table 2

Summary of the Research on the Effect of Shadowing on the Listening Ability

Author (year)	N	Level	Length	Improved	Other Groups	Proficiency
Yashima (1988)	9-16	College	2 months	Yes	-	-
Tamai (1992)	94	High S.	3.5 months	Yes	> Dictation	-
Yanagihara (1995)	90	College	2 months	Yes	> Dictation, > Comprehension	Low-level ^a
Tamai (1997)	25	College	5 days	Yes	-	Low-level
Sato & Nakamura (1998)	131	College	1 year	N/A	= Comprehension	Low-level
Tamai (2005)						
Experiment 1	93	College	3 months	Yes	= Dictation, > NI	-
Experiment 2	51	College	5 days	Yes	> NI	-
Tateuchi (2005)	77	College	10 weeks	Yes	> Comprehension	-
Suzuki (2007)						
Practical Study 1	27	High S.	5 days	Mixed ^b	* Comprehension	-
	112	High S.	3 months	No	< Comprehension	Mixed ^c
Practical Study 2	114	High S.	3 months	No	= R&L, = Repetition	Mixed ^c

Note. “Improved” indicates whether the shadowing group showed significant improvement in the listening test; “High S.” refers to high school students; N/A = Not analyzed; The symbols such as “>, <, =” “Proficiency” means whether the proficiency level of shadowing group affected their results on the posttests.

^a The lower-level group showed the most remarkable improvement when the posttest consisted of linguistic items they learned in the training, but this effect did not appear when the posttest consisted of new items.

^b Significant improvement was observed when shadowing was incorporated before studying the material.

^c See Table 1.

There are also limitations to these studies. One is that the participants of all the studies were either high school or college/university students.

Therefore, whether shadowing is effective for younger learners is unknown. Shadowing is a mechanical activity in which learners repeat the input as soon and exactly as said. Young learners like elementary school students may get bored easily. The other is that there seem to be problems with the statistical analyses. To be exact, many studies neglected the issue of test multiplicity and repeated *t* tests to compare several means without adjusting the significance level. This might have increased the risk of Type I error, causing the authors to draw a totally opposite conclusion; i.e., to conclude shadowing improved the listening ability even though it did not. In those days, statistical analyses were not as common as today, so it is worth reviewing the newer studies to confirm the effect of shadowing.

Notes

¹ One of these schools was Hakuoh Ashikaga High School in Tochigi, where the author worked as an English teacher until 2007. We tried to develop a curriculum to foster students' problem-solving abilities while giving them opportunities to do research on various social problems and make presentations about them.

² According to Yashima, "shadowing" was not an established term at that time. The other terms like "follow-up" "repeating" and "reproduction" were used by various training centers for interpreters. In fact, Tamai used "follow-up" in his 1992 study but changed it to "shadowing" in his subsequent studies (Tamai, 1997, 2005).

³ Descriptive statistics of the TOEFL listening and dictation tests are not presented in this paper. Therefore, it is unknown how much the scores improved after the training.

⁴ After he found the proficiency effect in his 1997 study, Tamai reanalyzed this data by dividing the participants into three proficiency groups.

ANOVAs revealed that there was an interaction between the proficiency group and the instruction type, and post hoc analyses showed that shadowing is more effective for middle- and lower-level learners than for upper-level learners. The results and discussion of this analysis are reported in Tamai (2005, pp. 39-46).

⁵ This study is also reported in Tamai (2005).

⁶ According to Tamai (2005), his 2005 book is based on his doctoral thesis completed at Kobe University in 2001.

⁷ This listening test, which was created based on Bostrom (1990), is different from ordinary comprehension tests. In this test, participants were presented with just a series of numbers or letters of the alphabet (e.g., W, D, W, I, C, P) rather than a passage, and then asked to answer the number or letter that corresponded to what the speaker said (“*The fourth letter is...*”).

⁸ According to Suzuki, the participants were divided into three proficiency groups based on their reading scores on three end-of-term exams.

⁹ Takayama (2007) also reports a weak correlation ($r = .09$).

References

- Bostrom, R. N. (1990). *Listening behavior*: The Guilford Press.
- Kadota, S. (2007). *Shadowing to ondoku no kagaku [The science of shadowing and oral reading]*. Cosmopier.
- Kougo, H., & Kubono, M. (2004). Eigo II: Intake of the text and insight. *Eigo Kyoiku*, 53 (September), 40-42.
- MEXT. (2003). *Eigo ga tsukaeru nihonjin ikusei no tameno koudou keikaku [The national action plan to cultivate “Japanese with English abilities”]*. Retrieved from https://www.mext.go.jp/b_menu/shingi/chukyo/chukyo3/004/siryu/04031601/005.pdf

- MEXT. (2008a). *Shougakkou gakushu shidou youryou [The Course of Study for elementary school]*.
- MEXT. (2008b). *Chuugakkou gakushu shidou youryou [The Course of Study for middle school]*.
- MEXT. (2009). *Koutougakkou gakushu shidou youryou [The Course of Study for high school]*.
- Oki, T. (2010). The role of latency for word recognition in shadowing. *ARELE (Annual Review of English Language Education in Japan)*, 21, 51-60.
- O'ki, T. (2011). Shadowing kaishiki ni okeru gakushusha no fukushou strategy no bunrui [Classification of learners' repetition strategies in shadowing at the beginning stage]. *KATE Journal*, 25, 33-43.
- O'ki, T. (2012). Word repetition in EFL shadowing: The roles of phrasal knowledge, context, and proficiency. *ARELE (Annual Review of English Language Education in Japan)*, 23, 45-60.
- O'ki, T. (2014). Kurikaeshi no shadowing eno kouka: Gakushusha wa yoriookuno gowo fukushou dekiruka? [Effectiveness of repetition on shadowing: Can learners repeat more words?]. *Hakuou Daigaku Ronshu (The Hakuoh Daigaku Journal)*, 28 (2), 169-187.
- O'ki, T., & Izumi, Y. (2015). Shadowing to sokuchou dictation: Dochiraga onseichikakuryoku wo koujou saseruka? [Shadowing vs. accelerate speech dictation: Which improves learner's decoding skill?]. *Hakuoh Daigaku Kyouiku Gakubu Ronshu (Hakuoh Journal of the Faculty of Education)*, 9 (1), 227-243.
- Oshima, H. (2003). Bunpou yakuokushiki kara Onsei juushie: Intake wo huyasu shadowing. *Eigo Kyoiku*, 51, 40-42.
- Sato, T., & Nakamura, N. (1998). Shadowing no kouka to gakushusha no ishiki [The effects of shadowing and the students' feedback]. *Tsukuba*

Kokusai Daigaku Kenkyu Kiyou, 4, 47-57.

- Suzuki, H. (2007). Shadowing wo mochiita eigoryoku koujou no shidou ni tsuiteno kenshou [An investigation into the instructions for fostering English listening comprehension using shadowing]. *STEP Bulletin*, 19, 112-124.
- Takayama, Y. (2007) Shadowing skill wa eigo unyou nouryoku no shihyou to naruka [Can shadowing skill be a measure of practical English ability?]. *Eigaku Ronko*, 36, 11-23.
- Takei, A (Ed.). (2002). *Eigo listening ron [The theory of English listening]*. Kagensha.
- Tamai, K. (1992). “follow-up” no chokairyoku koujou ni oyobosu kouka oyobi “follow-up” nouryoku to choukairyoku no kankei [The effect of “follow-up” on development of listening ability and the relationship between “follow-up” ability and listening ability]. *STEP Bulletin*, 4, 48-62.
- Tamai, K. (1997). Shadowing no kouka to choukai process ni okeru ichiduke [The effect of shadowing and its role in the listening comprehension process]. *Jiji Eigogaku Kenkyu*, 36, 105-116.
- Tamai, K. (2005). *Listening shidohou toshiteno shadowing no kouka ni kansuru kenkyu*. [Research on the effects of shadowing as a listening instruction]. Kazama Shobo.
- Tateuchi, T. (2005). Shadowing jissen wo riyoushita listening shidou (Shadowing effects on listening comprehension). *Aichi Kyoiku Daigaku Jissen Sougou Center Kiyou*, 8, 149-154.
- Yanagihara, Y. (1995). Eigo choukairyoku no shidouhou ni kansuru jikkennteki kenkyu: shadowing to dictation no kouka ni tsuite [A study of teaching methods for developing English listening comprehension: The effects of shadowing and dictation]. *Language*

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Laboratory, 32, 73-89.

Yashima, T. (1988). Tsuuyaku kunren no Eigo Kyoiku eno Ouyou I [Applying an interpretation training method to English instruction I]. *Eigaku/Heian Jogakuin Tanki Daigaku Eigakukai*, 21, 29-37.