

# Student Reflections on the Effectiveness of Shadowing and Listening Practice

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## Reference Data:

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This paper examines student comments on surveys after one of three different types of interventions: listening to L1 speakers ( $n = 18$ ), shadowing L1 speakers ( $n = 41$ ), or shadowing L1 and L2 speakers ( $n = 40$ ). We compare the responses to Likert scale and open-ended questions regarding changes in student confidence in judging English speaking ability (in themselves and others), perceived improvements in speaking ability, and whether the interventions were perceived as enjoyable and a good use of class time. We found that shadowing practice improved student perceptions of their speaking ability and ability to evaluate speech more than listening practice did. We also found that based on qualitative responses, shadowing both English L1 and L2 speakers increased self-awareness of speaking to a greater extent than only shadowing L1 speakers and was perceived to be less difficult than shadowing only L1 speakers.

本稿ではアンケート調査による生の回答を精査することにより、L1話者音声のリスニング( $n = 18$ )、L1話者音声のシャドーイング( $n = 41$ )、L1話者とL2話者の音声のシャドーイング( $n = 40$ )の3種類の介入の効果を論じる。自分や他者の英語スピーキングを評価する際の自信、スピーキング力が向上したという自覚、介入は楽しい練習と思ったか、授業時間を有効に使えたと感じたかに関して、リッカート尺度と自由記述により得られた回答の比較を行った。シャドーイング群は、リスニング群に比べて、スピーキング力及びスピーキング評価能力がより大きく向上したと知覚した。また、質的調査によると、L1/L2シャドーイング群はL1シャドーイング群に比べて、スピーキングにする自己認識が高まり、シャドーイングタスクに比較的困難を感じなかったことが判明した。

Improving spoken fluency and comprehensibility is a common goal of language learners. However, listening classes in Japan may focus on overall comprehension rather than bottom-up skills such as phonological awareness, as they are not common on entrance or standardized tests, while ESL classes in Western countries often emphasize communicative language teaching (Hamada, 2021). As a result of this gap, shadowing has become increasingly popular for developing listening skills as well as improving pronunciation, especially in Asia (Hamada, 2021).

Shadowing means to “repeat speech aloud as they [learners] hear it, as precisely as possible, while continuing to listen attentively to the incoming speech” (Kadota, 2019). Shadowing is different from other pronunciation activities such as repetition in that it is an on-line task, with no pausing and a focus on input speech sounds (Kadota, 2012). Speech sources can include English textbook audio, recorded speeches, movie clips, and live speakers (including the teacher). Shadowing can be beneficial for EFL learners in terms of word accuracy, articulation speed, and listening comprehension (Foote & McDonough, 2017; Hamada, 2015, 2016, 2019; Hori 2008; Kadota, 2012, 2019; Mori 2011; Tamai 1992, 1997). However, despite the growing popularity of this method in Japan, there are still many areas that have yet to be studied, such as the differential effects of L1 and L2 shadowing input.

The use of L2 speaker input can be important in listening activities as students are more likely to hear other L2 speakers in EFL contexts like Japan. Furthermore, L2 English users are more likely to have chances to communicate with L2 English speakers, as speakers in what Kachru (1997) terms the extended circle outnumber those in inner circle countries. Unless students are exposed to a diversity of accents in English, nativeness principles (Levis, 2005) may be reinforced, which may lead students to have negative attitudes towards accented English (Derwing & Munro, 2015). Some teachers and students may be against the idea of L2 shadowing because they believe that L2 English varieties are not accurate. However, all English speakers have an accent, including Japanese English speakers. Therefore, recent pronunciation studies have

argued that L2 English speakers should aim for intelligible rather than native-like pronunciation (Munro 2020; Munro & Derwing, 2015).

This study examines data collected with the aim of improving speech intelligibility among students in a listening class. Based on previous research, we predicted that shadowing practice would be perceived as more effective than listening in terms of improving speaking ability and phonological awareness. This is because shadowing is an active and phonologically focused activity whereas listening is more passive and meaning focused (Hamada, 2021). We also predicted that shadowing both English L1 and L2 speakers would be more effective for phonological awareness than shadowing L1 speakers alone, as this allows students to compare and contrast the phonological features of different speakers. Variation in spoken input in listening has been found to be crucial in students' perception of other speakers and judgment of their spoken output. High variability training studies (e.g. Shinohara & Iverson, 2018; Thomson, 2018), where learners are exposed to different varieties of English, show that L2 learners' improvement in perception and production of English is also extendable to the judgement of the pronunciation of newly encountered speakers. The same reasoning applies to different accents of L2 English (not just different speakers who share the same L1 English dialect), which should help listeners understand incoming messages.

In addition, this study aimed to address the dearth of research into the perceptions of learners regarding the benefits of shadowing. Foote and McDonough (2017) interviewed ESL students in Canada, but the focus was narrow (enjoyment of shadowing and the effect on pronunciation) and none of the participants were Japanese, so it is unclear how Japanese students in an EFL environment would feel about the activity. While Hamada (2017) examined Japanese EFL students, his questions focused on the ease and difficulty of shadowing rather than the perceived benefits and overall experience. Moreover, Hamada (2021) proposed that students peer and self-check their shadowing for segmental accuracy, suggesting that it is important to examine student confidence in rating speech input and how this confidence changes over time.

## Research Questions

With gaps in previous research on shadowing in mind, we examined how activity (shadowing vs listening) and input type (English L1 speaker samples vs English L1 & L2 speaker samples) affected students' perceptions of:

RQ1. Changes in general speaking ability

RQ2. Changes in confidence judging English speaking ability

RQ3. Usefulness and enjoyment of the activity

This paper focuses on student perceptions of shadowing and listening activities. Quantitative ratings of samples (self-ratings by students and ratings by trained English L1 raters) before and after shadowing and listening practice are discussed separately (Head & Yamane, 2022).

## Methods

### Participants

All students were non-English majors ( $N = 101$ ) in compulsory 1st-year university English listening classes at a Japanese university. Intact classes were asked to listen to English L1 samples (listening group,  $n = 20$ ), shadow English L1 samples (L1 shadowing group,  $n = 41$ ), or shadow English L1 and L2 samples (L1/L2 shadowing group,  $n = 40$ ). The research was approved by the university ethics committee, and all students participated in the activity, though only data from students who signed an informed consent form were analyzed.

### Procedure

The experiment took place during class time (one class per week) over the course of 5 weeks in total. The textbook series used in these listening classes focused on understanding speech content rather than phonology, so during week 1 students listened to an explanation of phonological concepts (segmental pronunciation, rhythm, and intonation) in Japanese. They then recorded themselves reading a short story (see Appendix A) using their smartphones, and then evaluated their recording along with three other English L2 speaker recordings on a 9-point scale (1 equaling totally incomprehensible and 9 being perfect) in terms of pronunciation, rhythm, and intonation. The story was written using vocabulary that Japanese students study in junior high school to minimize errors caused by unknown words. The story also contained words that represented a wide variety of segmental and suprasegmental phonological features, allowing production of accurate pronunciation, intonation, and rhythm to be evaluated.

Weeks 2 to 4 involved different interventions. The listening group listened to a recording of an English L1 speaker reading the short story six times each session (this was reduced to 3 times for weeks 3 and 4 due to students' complaints about boredom). The L1 shadowing group shadowed the English L1 speaker six times each session (two times with the text displayed and four without). The L1/L2 shadowing group underwent

the same procedure as the L1 group but alternated between shadowing recordings of the English L1 speaker and an L2 speaker. A different L1 and L2 speaker was used each week, and the same L1 speaker sample was used with all three intervention groups. All groups were told to pay attention to the way the sample speakers spoke and to think about how it compared to their own speech.

At the end of data collection (week 5), students repeated the procedure of week 1 (without the video lecture) and afterwards completed a questionnaire containing 9-point Likert-scale responses to statements (with 1 indicating strong disagreement and 9 strong agreement), as well as space to provide open-ended responses explaining the reasons for the Likert-scale answers (see Appendix B). All questions were written in both English and Japanese, and students could write qualitative responses in either language.

## Analysis

All statistical analyses of the quantitative survey data were performed using JASP software (JASP Team, 2021). All qualitative survey comments were transcribed, translated into English, and independently coded by the authors who then compared and reconciled their results.

## Results

Values over 5 on the 9-point scale were taken to indicate agreement with the statement and values lower than 5 to indicate disagreement. ANOVA was used to compare the means of the three intervention groups, with post hoc test p-values calculated using Tukey correction and effect size using Cohen's *d*. The nonparametric Kruskal-Wallis test was used when the Levene's test indicated that assumptions for ANOVA of equal variance between groups were not met, with Dunn's post hoc comparison p-values calculated using Bonferroni correction and effect size using eta-squared. Raincloud plots showing the distribution of quantitative results can be found in Appendix C.

Qualitative comments regarding reasons for the quantitative scores were coded and then the prevalence of different responses for each group was compared by dividing the number of each comment type by the total number of respondents in each group. Due to the low number of responses from the listening group discussion of comments focuses on differences between the two shadowing groups.

## RQ1: Changes in Speaking Ability

A Kruskal-Wallis test indicated no significant differences between groups in terms of changes in speaking ability. The median scores for the two shadowing groups were higher than the listening group and the mean scores of both the L1 shadowing ( $M = 5.49$ ,  $SD = 1.10$ ) and L1/L2 shadowing ( $M = 5.70$ ,  $SD = 1.70$ ) groups also indicated that they felt that their speaking had improved after shadowing practice, while the listening group ( $M = 4.40$ ,  $SD = 2.16$ ) did not.

Student comments, summarized in Table 1, indicate that the main differences between the two shadowing groups were that the L1 group was more likely to mention improved fluency (28%) than the L1/L2 group (11%), whereas the L1/L2 group was more likely to mention awareness of their own speaking (27%) than the L1 group (13%). Overall, both groups felt shadowing was good practice, improved their pronunciation, and increased phonological understanding. However, some students lacked confidence, felt that there was not enough practice, and had difficulty shadowing.

Table 1

*Coded Student Reasons for Response to the Statement "I feel my speaking has improved after shadowing practice"*

Comment code description	L1 Shadowing ( <i>n</i> = 39)	L1/L2 Shadowing ( <i>n</i> = 37)
<i>Positive reasons</i>		
Good practice opportunities	(9) 23%	(8) 22%
Greater fluency	(11) 28%	(4) 11%
Awareness of own speaking	(5) 13%	(10) 27%
Improved pronunciation/mimicry	(6) 15%	(4) 11%
Greater understanding of phonology	(5) 13%	(6) 16%

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Comment code description	L1 Shadowing (n = 39)	L1/L2 Shadowing (n = 37)
Familiarity with text	(2) 5%	(4) 11%
<i>Negative reasons</i>		
Lack of confidence in own ability	(3) 8%	(1) 3%
Not enough practice	(2) 5%	(2) 5%
Difficulty shadowing/listening	(1) 3%	(2) 5%
Lack of fluency	(1) 3%	(1) 3%
Only improved text that was practiced	(1) 3%	(0)
Ineffective method	(0)	(1) 3%

## RQ2: Changes in Confidence Judging English Speaking Ability

The next set of questions looked at how confident students were in judging the English L2 speech of other people and themselves. Students were asked to recall their confidence levels before and after the experimental practice sessions. Table 2 shows that all groups were less confident judging their own speech than the speech of other people. In addition, all groups recalled not being confident (mean score below 5) before the intervention, although the scores for all groups increased, with the L1 and L1/L2 shadowing group means for judging others and the L1/L2 mean for self-judgement increasing to above 5. To see which groups most improved in confidence, the initial score was subtracted from the later score for each group. A Kruskal-Wallis test showed significant group differences in change in confidence for both judging others ( $H(2) = 21.25, p < .001, \eta^2 = .196$ ) and self-judgement ( $H(2) = 14.76, p < .001, \eta^2 = .130$ ). A Dunn's post hoc comparison showed that the change in the L1 shadowing group was

significantly higher than the change in the listening group ( $p < .001$ ) when judging others and significantly higher than both the listening ( $p < .001$ ) and L1/L2 shadowing ( $p = .016$ ) groups when self-judging. In addition, the L1/L2 group change was significantly higher ( $p = .004$ ) than the listening group for judging others.

**Table 2**

*Descriptive Statistics of Responses to the Statements "I feel confident in my ability to judge other peoples' English speaking" and "I feel confident in my ability to judge my own English speaking" Pre and Post Intervention.*

Statement type	Listening Mean (SD)		L1 Shadowing Mean (SD)		L1/L2 Shadowing Mean (SD)	
	Pre	Post	Pre	Post	Pre	Post
Judging others	3.60 (1.54)	3.70 (1.56)	3.51 (1.25)	5.07 (1.35)	4.33 (1.95)	5.45 (1.87)
Judging self	3.50 (1.73)	3.65 (1.81)	3.15 (1.35)	4.61 (1.58)	4.28 (1.77)	5.08 (1.75)

The comments of the two shadowing groups (Table 3) indicate that the L1 group was more likely to mention improved skills (improved pronunciation, suprasegmental awareness, and English ability) whereas the L1/L2 group was more likely to mention increased awareness (improved overall awareness, ability to understand the difference between speakers, and exposure to different voices). The most common negative reason for responses given by both groups was low English ability.

**Table 3**

*Coded Student Reasons for Response to the Statement “I feel confident in my ability to judge (other people’s / my own) speaking”*

Comment code description	L1 Shadowing		L1/L2 Shadowing	
	Others (n = 38)	Self (n = 38)	Others (n = 36)	Self (n = 36)
<b>Positive reasons</b>				
General awareness increased	(8) 21%	(6) 16%	(10) 28%	(9) 25%
Pronunciation awareness increased	(9) 24%	(7) 18%	(3) 8%	(3) 8%
Suprasegmental awareness increased	(7) 18%	(5) 13%	(2) 6%	(3) 8%
Able to understand differences between speakers	(5) 13%	(1) 3%	(8) 22%	(7) 19%
Exposure to different voices	(4) 11%	(3) 8%	(7) 19%	(6) 17%
Practice opportunity	(6) 16%	(8) 21%	(7) 19%	(6) 17%
Improved English ability	(3) 8%	(6) 16%	(1) 3%	(3) 8%
Increased confidence	(4) 11%	(4) 11%	(6) 17%	(0)
Opportunity to self-evaluate/record	(0)	(0)	(1) 3%	(2) 6%
<b>Negative reasons</b>				
Low English ability	(6) 16%	(7) 18%	(6) 17%	(8) 22%

Comment code description	L1 Shadowing		L1/L2 Shadowing	
	Others (n = 38)	Self (n = 38)	Others (n = 36)	Self (n = 36)
Still do not understand some parts	(4) 11%	(3) 8%	(1) 3%	(0)
Difficult to self-judge	(0)	(2) 5%	(0)	(2) 6%
Not sure if judging correctly	(1) 3%	(1) 3%	(5) 14%	(1) 3%
Low confidence	(2) 5%	(1) 3%	(5) 14%	(1) 3%
No improvement	(0)	(1) 3%	(0)	(1) 3%
Not enough practice	(0)	(1) 3%	(0)	(1) 3%
Not enough speaking practice	(0)	(0)	(0)	(1) 3%
Neutral/no change	(1) 3%	(2) 5%	(1) 3%	(2) 6%
No reason	(0)	(0)	(1) 3%	(0)

### RQ3: Usefulness and Enjoyment of Activity

All three groups felt that the activity was a good use of class time. There were also no significant group differences between listening ( $M = 6.10$ ,  $SD = 2.43$ ), L1 shadowing ( $M = 6.42$ ,  $SD = 1.47$ ), and L1/L2 shadowing ( $M = 6.63$ ,  $SD = 2.15$ ) according to the Kruskal-Wallis test.

Student comments about the usefulness of the shadowing activities during class time (Table 4) indicated that both groups felt they were good practice. However, the L1 shadowing group was more likely to mention improved listening (21%) than the L1/



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L2 shadowing groups (8%), as well as the activity being motivating or fun (11% for L1 shadowing and 3% for L1/L2 shadowing). Conversely, the L1/L2 shadowing group was more likely than the L1 shadowing group to report improved general speaking (19% vs 8%), awareness of own speaking (16% vs 5%), improved pronunciation (14% vs 8%), improved rhythm/intonation (8% vs 3%), and improved fluency (5% vs 1%).

**Table 4**

*Coded Student Reasons for Response to the Statement “I feel listening/shadowing practice was a good use of class time”*

Comment code description	L1 Shadowing (n = 38)	L1/L2 Shadowing (n = 37)
<i>Positive reasons</i>		
Good practice	(17) 45%	(10) 27%
Improved pronunciation	(3) 8%	(5) 14%
Improved listening	(8) 21%	(3) 8%
Improved speaking generally	(3) 8%	(7) 19%
Awareness of own speaking	(2) 5%	(6) 16%
Improved rhythm/intonation	(1) 3%	(3) 8%
Motivating/fun	(4) 11%	(1) 3%
New experience	(1) 3%	(2) 5%

Comment code description	L1 Shadowing (n = 38)	L1/L2 Shadowing (n = 37)
Improved fluency	(1) 3%	(2) 5%
Improved understanding	(1) 3%	(0)
Unclassified	(0)	(1) 3%
<i>Negative reasons</i>		
Difficulty shadowing	(3) 8%	(2) 5%
Dislike activity	(0)	(1) 3%
Group practice is difficult/embarrassing	(1) 3%	(1) 3%
No improvement	(0)	(1) 3%
Unmotivated	(1) 3%	(0)

Although there were more mentions by the L1 group of the activity being fun (Table 4), when the two shadowing groups were specifically asked if it was fun to do shadowing practice, the L1/L2 shadowing group generally agreed ( $M = 5.98$ ,  $SD = 1.89$ ) while the L1 shadowing group disagreed ( $M = 4.59$ ,  $SD = 1.96$ ), with the difference in scores being significant [ $F(1,79) = 10.55$ ,  $p = .002$ ,  $\eta^2 = .118$ ] and post hoc tests indicating that the L1/L2 shadowing group scores were significantly higher than the L1 group scores [ $t = -3.247$ ,  $d = -0.72$ ,  $p = .002$ ].

Comments regarding the reasons for the enjoyment of the shadowing activity (Table 5) revealed the following trends: Similar numbers of students mentioned positive effects

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like improved ability (L1, 16%; L1/L2, 17%), enjoying shadowing (L1, 13%; L1/L2, 17%), improved fluency/speed (L1, 11%; L1/L2, 8%), and enjoying speaking (L1, 8%; L1/L2, 6%). However, the L1/L2 group was more likely to mention enjoying matching the sample (L1, 3%; L1/L2, 17%), having a new experience (L1, 3%; L1/L2, 14%), and self-awareness (L1, 0%; L1/L2, 11%). In addition, the L1 shadowing group was more likely to mention negative aspects such as difficulty shadowing (L1, 39%; L1/L2, 17%), the sample speed being too fast (L1, 16%; L1/L2, 8%), and a lack of English ability/confidence (L1, 11%; L1/L2, 0%).

Among the comments summarized in Table 5, some L1/L2 shadowing group students mentioned that the variety of accents made the experience interesting (“There are various pronunciations and it’s kind of interesting”). In addition, others mentioned that shadowing L2 speakers was easier and thus more enjoyable than shadowing L1 speakers (“It’s not fun because I cannot keep up with the shadowing of people whose pronunciation is too beautiful or too smooth to read. However, I enjoyed the shadowing of people who were at my level”).

**Table 5**  
*Coded Student Reasons for Their Response to the Statement “I feel it was fun to do shadowing practice”*

Comment code description	L1 Shadowing (n = 38)	L1/L2 Shadowing (n = 36)
<i>Positive reasons</i>		
Enjoy shadowing	(5) 13%	(6) 17%
Improved ability	(6) 16%	(6) 17%
Improved fluency/speed	(4) 11%	(3) 8%
Enjoy matching the example	(1) 3%	(6) 17%

Comment code description	L1 Shadowing (n = 38)	L1/L2 Shadowing (n = 36)
New experience	(1) 3%	(5) 14%
Enjoy speaking	(3) 8%	(2) 6%
Self-awareness	(0)	(4) 11%
Familiarity/practice makes it easy	(1) 3%	(0)
Enjoy seeing new ways of reading	(0)	(1) 3%
Unclassified	(1) 3%	(0)
<i>Negative reasons</i>		
Difficulty shadowing	(15) 39%	(6) 17%
Too fast	(6) 16%	(3) 8%
Lack of English ability/confidence	(4) 11%	(0)
Embarrassing	(1) 3%	(2) 6%
Not fun	0	(3) 8%
Too repetitive	0	(1) 3%

## Discussion

This study used surveys to examine how type of practice (shadowing and listening) and input (English L1 speaker samples alone or alternating with L2 speaker samples) affected student perceptions of their speaking abilities, confidence evaluating speech, and enjoyment of the activities. We will summarize and discuss these results in the following sections.

### Changes in Speaking Abilities (RQ 1)

Students in the two shadowing groups felt that they improved their speaking abilities more than the listening group, although the difference was not significant. This result may be because the shadowing groups had more practice producing the sounds that they listened to, thus seeing improvement and gains in confidence. This is supported by comments mentioning improved pronunciation and phonological understanding. The L1/L2 shadowing group also mentioned greater awareness of their own speaking more than the L1 group, which may have been due to them trying to match the speaking of both L1 and L2 speakers, although the L1 group mentioned improved fluency more often.

### Changes in Confidence Judging Speaking Ability (RQ 2)

All groups were more confident judging other peoples' speech rather than their own, both before and after the intervention, and reported low initial confidence. However, both shadowing groups became more confident after the practice sessions than the listening group, with both the L1 and L1/L2 shadowing group changes significantly higher than the listening group's for confidence judging others, and the L1 shadowing group significantly higher for judging their own speech than the other two groups. However, the L1/L2 group had higher mean scores than the other groups for judging others and themselves both before and after, which might be why the changes were not as large as the L1 shadowing group, which reported lower initial confidence. As the listening group did not change much in confidence, we can surmise that simple familiarity with the source material is not sufficient, but rather that the phonological awareness that comes from trying to match the sample speeches led to increased confidence.

Both of the shadowing groups mentioned low English ability as the main reason for low confidence in judging, although reasons for increased confidence differed, with the L1 group more likely to mention improved speaking skills but the L1/L2 group more likely to mention increased awareness of speech.

## Enjoyment and Usefulness of the Activity (RQ 3)

There were no significant differences among the three groups in terms of the perceived usefulness of the activity. However, it should also be noted that the listening group complained that the activity was boring whereas the shadowing groups did not. This may be due to different classroom dynamics, but is likely because the active nature of shadowing kept students engaged. When looking at reasons for the scores, the L1 shadowing group was more likely to report improved listening than the L1/L2 group, whereas the L1/L2 group was more likely to report improved speaking ability and awareness of their own speaking.

Although both shadowing groups found the activities useful, the L1/L2 group reported significantly higher enjoyment. In their comments, the L1 group was more likely to mention difficulty shadowing or that the sample was too fast, while the L1/L2 group was more likely to mention enjoying matching the sample, having a new experience, and increased self-awareness. Perhaps the L1/L2 group enjoyed the activity more because the L2 samples may have been slower and thus easier to shadow. In addition, by comparing themselves to other speakers making errors rather than "perfect" L1 speakers, it may have increased their self-confidence. The L1/L2 group may also have enjoyed the greater variety of speaker samples.

## Limitations

The participants were not randomly assigned but rather were in intact classes, so there were likely variations in ability and motivation levels between classes. In addition, the listening group practiced three times per class rather than six for the shadowing groups, meaning that they had less exposure to the audio input than the other groups. One further limitation is that the results of the pre-test for RQ 2 are based on recalled values rather than actual values recorded before the interventions.

## Conclusion

This study sought to compare shadowing practice to listening practice, as well as explore the effect of shadowing both English L1 and L2 speaker samples. The results indicate that shadowing increased perceived gains in general speaking ability and confidence in speech judgement compared to listening. In addition, shadowing both English L1 and L2 speakers may be more enjoyable for students and appears to be at least as effective as shadowing only L1 speakers in terms of improved speaking ability.



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Shadowing both L1 and L2 speakers may also increase awareness of students' own speaking and be easier to practice relative to L1 only sample input.

Based on these results, teachers should consider introducing shadowing into their classes and should have students record and listen to their own speech to gain self-awareness of and improve speaking abilities. In addition, teachers who wish to use shadowing in their classes may wish to start with slower speech samples and use both English L1 and L2 speakers to help raise awareness of the differences in phonological features between the students' L2 speech and the target sounds.

### Bio Data

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### References

- Derwing, T. M., & Munro, M. J. (2015). *Pronunciation fundamentals: Evidence-based perspectives for L2 teaching and research* (Vol. 42). John Benjamins Publishing Company.
- Foot, J. A., & McDonough, K. (2017). Using shadowing with mobile technology to improve L2 pronunciation. *Journal of Second Language Pronunciation*, 3(1), 34-56. <https://doi.org/10.1075/jslp.3.1.02foo>
- Hamada, Y. (2015). Monitoring strategy in shadowing: Self-monitoring and pair-monitoring. *The Asian EFL Journal, Professional Teaching Articles*, 81, 4-25. <https://doi.org/10.1177/1362168815597504>
- Hamada, Y. (2016). Shadowing: Who benefits and how? Uncovering a booming EFL teaching technique for listening comprehension. *Language Teaching Research*, 20(1), 35-52.
- Hamada, Y. (2017). *Teaching EFL Learners Shadowing for Listening: Developing learners' bottom-up skills*. Routledge. <https://doi.org/10.4324/9781315677118>
- Hamada, Y. (2019). Shadowing: What is it? How to use it. Where will it go? *RELC Journal*, 50(3), 386-393. <https://doi.org/10.1177/0033688218771380>
- Hamada, Y. (2021). Shadowing procedures in teaching and their future. *The Language Teacher*, 45(6), 32-36. <https://doi.org/10.37546/JALTTLT45.6-3>
- Head, P., & Yamane, N. (2022). The effect of shadowing and the ability of Japanese EFL learners to evaluate L2 English Pronunciation. 大阪女学院大紀要第18 [Journal of Osaka Jogakuin University], 18, 109-126.
- Hori, T. (2008) Exploring shadowing as a method of English pronunciation training. A doctoral dissertation presented to the Graduate School of Language Communication and Culture, Kwansei Gakuin University.
- JASP Team (2021). JASP (Version 0.16) [Computer software]. <https://jasp-stats.org/>
- Kachru, B. B. (1997). World Englishes and English-using communities. *Annual Review of Applied Linguistics*, 17, 66-87. <https://doi.org/10.1017/S0267190500003287>
- Kadota, S. (2012). シャドーイング音と英語習得の科学 [Science of shadowing, oral reading, and English acquisition]. Cosmopier.
- Kadota, S. (2019). *Shadowing as a practice in second language acquisition: Connecting inputs and outputs*. Routledge. <https://doi.org/10.4324/9781351049108>
- Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *TESOL Quarterly*, 39, 369-377. <https://doi.org/10.2307/3588485>
- Mori, Y. (2011). Shadowing with oral reading: Effects of combined training on the improvement of Japanese EFL learners' prosody. *Language Education & Technology*, 48, 1-22. [https://doi.org/10.24539/let.48.0\\_1](https://doi.org/10.24539/let.48.0_1)
- Munro, M. J. (2020). *Applying phonetics: Speech science in everyday life*. Wiley-Blackwell.
- Munro, M. J. & Derwing, T. M. (2015). Intelligibility in research and practice: Teaching priorities, in M. Reed & J. Levis (Eds.) *The handbook of English pronunciation*. Wiley.
- Shinohara, Y., & Iverson, P. (2018). High variability identification and discrimination training for Japanese speakers learning English /r/-/l/. *Journal of Phonetics*, 66, 242-251. <https://doi.org/10.1016/j.wocn.2017.11.002>
- Tamai, K. (1992). 'Follow-up' の聴解力に及ぼす効果及び 'follow-up' 能力と聴解力の関係 [The effect of follow-up on listening comprehension]. *STEP Bulletin*, 4, 48-62.
- Tamai, K. (1997). シャドーイングの効果と聴解プロセスにおける位置づけ [The effectiveness of shadowing and its position in the listening process]. *Current English Studies*, 36, 105-116.
- Thomson, R. I. (2018). High variability [pronunciation] training (HVPT): A proven technique about which every language teacher and learner ought to know. *Journal of Second Language Pronunciation*, 4(2), 208-231. <https://doi.org/10.1075/jslp.17038.tho>

## Appendix A

### Mr. Mouse

Mr. Mouse went to visit Ms. Cat and found her in a big room, making some clothes. The mouse said, “What are you doing in your room Ms. Cat?”

The cat replied: “Well, I’m making a hat for myself. I’ll finish it and wear it to work.” So you see, the cat would wear her hat to work. And then the cat asked the mouse about his day in return.

The mouse said that he went to the market this morning. He found a shiny dollar on the road and he bought some pudding with the dollar right away. Then a dog took it away and ate it near the window. The mouse was sad that the dog ate his dessert in front of him.

## Appendix B

### Survey Questions (English and Japanese)

- I felt confident in my ability to judge other peoples’ English speaking before (listening/shadowing) practice. (リスニングやシャドーイングの)練習をする前では、他人の英語スピーキングの評価を自信を持ってできた。
- I feel confident in my ability to judge other peoples’ English speaking. 他人の英語スピーキングの評価を自信を持ってできる。
- Why? なぜそう思いますか。
- I felt confident in my ability to judge my own speaking before (listening/shadowing) practice. (リスニングやシャドーイングの)練習をする前では、自分の英語スピーキング能力の評価を自信を持ってできた。
- I feel confident in my ability to judge my own speaking. 自分の英語スピーキング能力の評価を自信を持ってできる。
- Why? なぜそう思いますか。
- I feel my speaking has improved after (listening/shadowing) practice. (リスニングやシャドーイングの)練習の後では、英語スピーキングが上達したと感じる。
- Why? なぜそう思いますか。
- I feel (listening/shadowing) practice was a good use of class time. 授業時間に(リスニングやシャドーイングの)練習をするのは良かったと思う。
- Why? なぜそう思いますか。

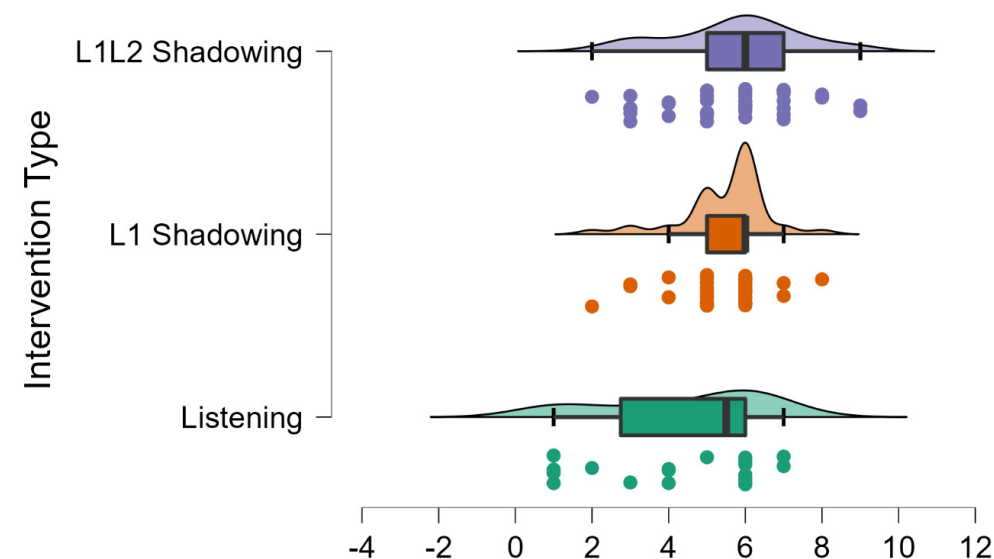
- I feel it was fun to do shadowing practice. シャドーイング練習は楽しいと思う。
- Why? なぜそう思いますか。

## Appendix C

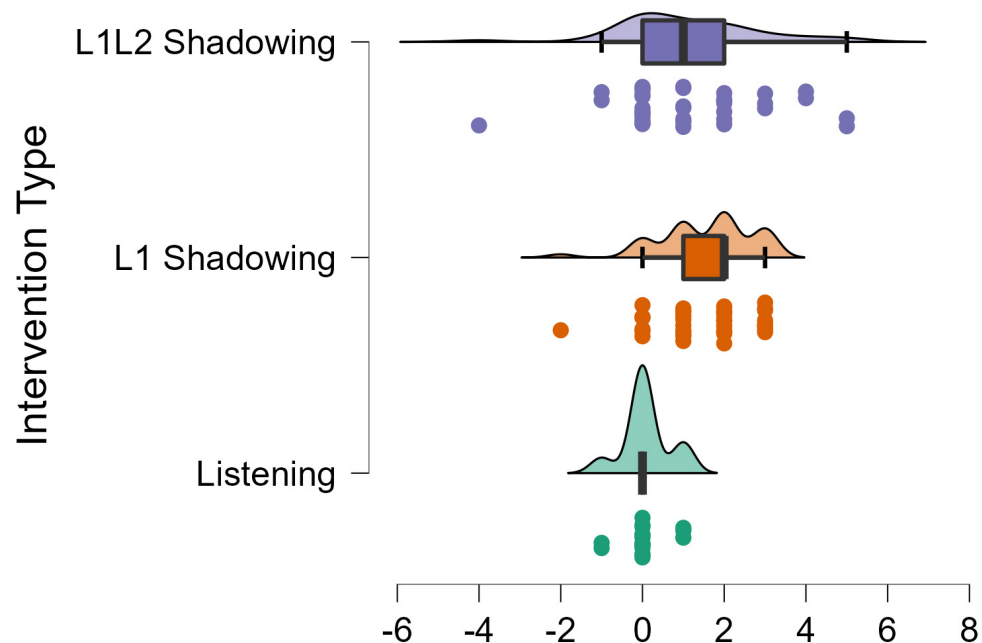
### Raincloud Plots of the Distribution of Student Survey Question Responses

Figure 1

*Raincloud Plot of Responses to the Statement “I feel my speaking has improved after listening/shadowing practice”*



**Figure 2**  
*Raincloud plot of the difference in confidence judging other peoples' English speaking before and after intervention.*



**Figure 3**  
*Raincloud plot of the difference in confidence self-judging English speaking before and after intervention.*

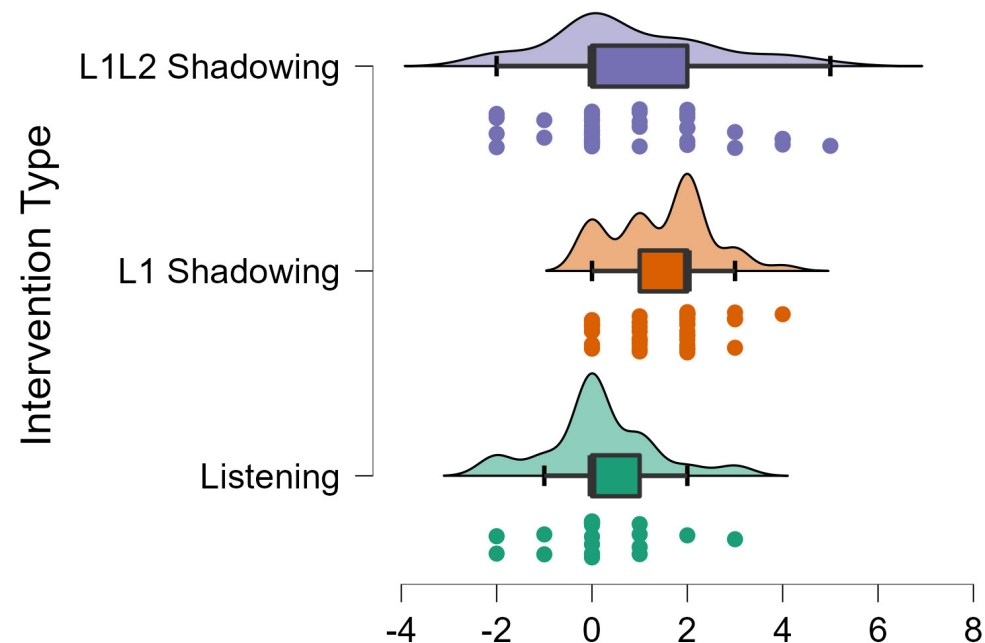


Figure 4

Raincloud plot of the responses to the statement “I feel listening/shadowing practice was a good use of class time”

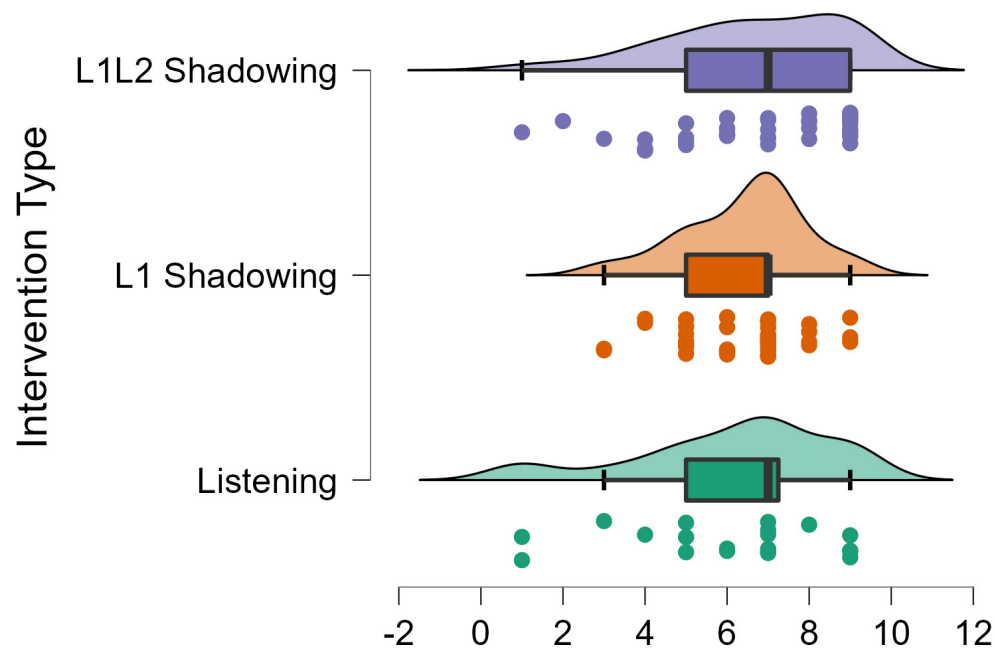


Figure 5

Raincloud plot of the responses to the statement “I feel it was fun to do shadowing practice”

