The Effects of Listening Instructions Using Materials with Background Noise on EFL Learners’ Listening Abilities

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Abstract

This study aimed to examine how listening instructions using materials with background noise affect EFL learners’ listening comprehension and their perceptions about background noise. Two classes of Japanese university students took part in the study. The experimental group received listening instruction using listening materials with background noise and the control group received the same listening instruction using materials without noise. The experiment was conducted over the course of ten weeks, and the participants took pre- and post-listening tests to measure their listening comprehension and perception skills. Participants also answered pre- and post-questionnaires about their listening comprehension confidence levels and their perceptions of the noise. The results showed several findings. First, the effects of listening instructions using materials with noise on students’ listening skills did not differ from the effects of listening instructions using materials without noise. Second, students’ level of confidence in their listening comprehension with background noise improved in both groups, suggesting that the listening materials with noise did not affect their confidence level about listening with background noise. The results suggest that the language learners were still negatively affected by the presence of noise after receiving the listening instruction with noise.

1. Introduction

Background noise is part of our daily lives. For example, every day, we hear people talking at a cafeteria, the sound of traffic on the street, or the electronic noise from devices such as air conditioners and washing machines. It is indisputable that such noise affects our listening comprehension (Bradlow & Alexander, 2007; Field, 2008; Lecumberri & Cooke, 2006).

Researchers have said that the presence of noise affects first language (L1) and second language (L2) listeners differently (Field, 2008; Richards, 2005). Field (2008) argues that the presence of noise affects listeners’ confidence level about the input. According to Field, L1 listeners feel a high level of confidence in decoding what is said when noise is absent. On the other hand, when there is a high level of noise, such as in crowded pub, L1 listeners cannot trust the input completely, and they need to draw much more heavily upon context information. The L2
situation is different, however, because L2 listeners cannot decode input well due to a lack of linguistic knowledge. Nonetheless, the comprehension process still involves a balance between the confidence level regarding input and the need to draw upon external information (Field, 2008).

Richards (2005) also discusses how the presence of noise affects L1 and L2 listening processes. The presence of noise hampers the sensory memory of both L1 and L2 listeners. L1 listeners may be able to make sense of what is said by compensating for the disturbance using linguistic inferences or cultural background knowledge. However, L2 listeners, who lack linguistic or cultural knowledge, need to hear the whole input in order to comprehend it, and they often fail to reach a high level of comprehension.

Past studies examined the effects of noise on listening comprehension. Most of the studies focus on bilingual listeners (Rogers, Lister, Febo, Besing, & Abrams, 2006; Shi, 2009; 2010). Rogers, Lister, Febo, Besing, and Abrams (2006) compared the word recognition of native speakers to that of Spanish-English bilinguals in several noise conditions. They compared the scores of word recognition tests conducted in quiet, noisy, and noise with reverberation conditions. The results showed that the bilinguals who acquired English at an earlier age were more susceptible to the noise than were native speakers. Shi (2010) focused on bilingual listeners’ age of acquisition and their use of context information in the presence of noise. Five groups of bilinguals who acquired the target language at different ages, from native monolinguals to late non-native bilinguals, took part in the study. The results showed that native and early bilingual listeners were able to use context information as effectively as native listeners in mildly degraded conditions. However, compared with monolinguals, their use of context information was limited in severely degraded conditions.

A few studies have investigated the effects of noise on language learners. Shi (2009) focused on the learners’ age of English acquisition and the length of English learning. He concluded that learners who acquired English in later years were more negatively affected by weaker noise than those who acquired English at early ages. Hodoshima, Masuda, Yasu, and Arai (2009) investigated the effects of EFL learners’ proficiency levels on their listening perceptions in noisy conditions. The participants, who had different proficiency levels, took word identification listening tests under quiet, noisy, or reverberant conditions. The results showed that the upper-level students’ listening comprehension was negatively affected as the level of noise increased. However, lower-level students’ listening comprehension did not deteriorate as the degree of noise increased. The researchers concluded that the effects of noise on language learners were different depending on the noise level as well as on their proficiency levels. Masuda (2016) also focused on the relationship between learners’ proficiency levels and noise. She conducted a consonant identification experiment on native listeners as well as on EFL listeners with different proficiency levels. The results showed that, as the level of noise increases, the misperception patterns of the higher-proficiency listeners began to resemble those of lower proficiency listeners. Fujita (2016) examined EFL learners’ use of context information in various noise conditions. The
context information aided their listening comprehension in the moderate noise condition. However, in the conditions where the noise level was high or there was no noise, the context information did not aid their listening comprehension.

There are other studies that investigated the effects of noise from various aspects. Shi and Farooq (2012) examined the effects of noise and speech rate on bilingual listeners’ comprehension. The bilingual listeners listened to passages spoken at different speech rates in conditions with noise and without noise. They concluded that the participants’ listening comprehension deteriorated the most in the condition with both fast speech rate and noise. The degree to which participants were affected by the noise also changed in accordance with the speech rate. Rogers, Dalby, and Nishi (2004) examined the effects of noise on speakers’ foreign accents. They compared the listening comprehensibility of Chinese-accented English speech with that of native speakers’ speech in the noise condition. They found that the comprehensibility of accented speech was significantly less than that of native speech. This indicates that listeners might have some trouble understanding what non-native speakers say in noisy conditions. Powers et al. (2002) investigated whether test-takers were distracted by the noise made by other test takers. The results showed that noise distraction had an impact on test takers’ perceptions, but the impact was not large enough to affect their test scores.

To summarize the above past studies, background noise negatively affected the listening comprehension of bilingual listeners as well as language learners. The degree to which their listening comprehension was affected depended on various factors, such as the listener’s age at the time of target language acquisition, his or her proficiency level, or the characteristics of the listening input. However, few studies to date have been conducted concerning how listening instructions that use listening materials with noise affect learners’ listening comprehension skills. Thus, the aim of the current study is to investigate how listening instructions using materials with background noise affect EFL learners’ listening comprehension and their perceptions about background noise. The research questions are as follows.

RQ1: Do EFL learners improve their listening comprehension in noisy conditions after receiving listening instructions with noise?

RQ2: How do listening instructions with background noise affect EFL learners’ perceptions about listening in noisy conditions?

2. Method

2.1 Participants

Two classes of Japanese EFL learners at a private university in Japan participated in the study. The students were all freshmen majoring in medicine, aged 18 to 20. The focus of the
classes was preparation for the TOEFL ITP and iBT tests. The students were assigned to either an experimental group \((n = 28)\) or a control group \((n = 22)\). Their proficiency levels were in CEFR B1, based on TOEFL ITP scores from a placement test. Their listening proficiency was measured with the listening section of the TOEFL ITP test. Based on their scores, it was found that there was not a significant difference between the listening proficiency levels of the control group \((n = 22, M = 46.55, SD = 2.70)\) and the experimental group \((n = 28, M = 47.61, SD = 2.17)\), \((t(48) = 1.543, p = .130)\), \(d = 0.63\). After eliminating the data of those who did not complete the pre- and post-tests, the data of 24 students in the experimental group and 18 students in the control group were analyzed.

### 2.2 Material

**Listening materials for dictation practice.** Listening materials for the dictation practice conducted in class were adopted from a textbook for the TOEFL ITP test (Shishido, Mann, & Knowles, 2010). The dictation practice was chosen as the listening instruction method for two reasons. The first reason is based on the research aim. In order to analyze how the background noise affects participants’ listening comprehension in detail, dictation practice is ideal because it is possible to identify how participants perceived each word by examining the words that they wrote. The second reason is based on an educational purpose. One of the challenging parts of the listening section in the TOEFL ITP test is the phonological changes resulting from the fast speech rate. Because of the phonological changes, simple phrases such as, “I saw him in…” or “take a look at …” are difficult for learners to comprehend. By doing dictation, the learners have opportunities to learn how the sounds of some phrases change because of the English phonological system.

In each lesson, two short dialogues were used and twenty words were left blank in the transcript (see Appendix A). For educational purposes, words or phrases that contained phonological changes or idioms were chosen as targeted words. The listening materials used for the control group did not contain any background noise. For the experimental group, some background noise was added to the same listening materials that were used for the control group. The sound files for the experimental group were created using the free digital audio editor, Audacity. As background noise, *crowd talking* (Sound Jay, 2014) was used for all the listening materials in the experimental group. *Crowd talking* is a background noise that is similar to the sound of people talking in a crowded place. There are many occasions when daily conversations occur in a crowded area, which is why *crowd talking* could be matched to all of the topics of the dialogues in the dictation practice. The noise level was set to be at -5db so that it was not too annoying for the students in the dictation practice.

**Pre- and post-listening tests.** As pre- and post-listening tests, the participants took listening comprehension tests and dictation tests. The same listening tests were used as the pre- and post-tests. As the focus in the listening comprehension tests was the overall understanding of the
conversations, the learners’ listening comprehension skills were measured. In the dictation test, on the other hand, they were instructed to write down all the words that they heard. Therefore, their listening perception skills were measured.

In each test, listening test materials with and without background noise were prepared (see Table 1). The listening comprehension questions were adopted from a TOEFL ITP practice test (Hilke, Wadden, & Fujii, 2008). In the listening comprehension questions, ten questions were from the short conversation section, and the other seven questions were from the long conversation or the long talk sections. The full score of each test was 17. The listening materials with and without noise were prepared. Thus, the participants answered 34 listening comprehension questions in total.

In the dictation test, participants listened to four dialogues from the TOEFL ITP textbook (Shishido, Mann, & Knowles, 2010). Like the listening comprehension test, two of the dialogues were provided without noise, and the other two dialogues were provided with noise. There were 36 words in each noise version. As one point was allocated to each word, the total possible score in each dictation test was 36.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Pre- and post-listening tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Listening comprehension test</td>
</tr>
<tr>
<td></td>
<td>Without noise</td>
</tr>
<tr>
<td></td>
<td>With noise</td>
</tr>
</tbody>
</table>

**Questionnaire.** After the pre-and post-listening tests, the learners were asked about their level of confidence in their listening comprehension. The Likert-type scale was used and it ranged from 1 (I could not comprehend anything at all) to 4 (I could comprehend everything). They also answered a question about whether or not their listening comprehension was affected by the presence of noise (see Appendix B).

### 2.3 Procedure

The experiment was conducted over a ten-week period in a regular classroom environment, and partial dictation practice was used for the listening instructions. Because of time constraints, a partial dictation practice was conducted for about 30 minutes in each lesson. As shown in Figure 1, the participants took the pre-test in the first week, which consisted of the listening comprehension test and the dictation test. In the following weeks, a partial dictation practice was conducted. The experimental group listened to the listening materials with noise, while the control group listened to the same listening materials without noise. In each lesson, the students listened to each dialogue three times. The first time, they listened to the dialogue without pauses. The second time, the
instructor paused after each sentence, and the third time, there were no pauses. After the dictation practice, the students corrected their answers by themselves, and the instructor provided some explanations about the meanings of the vocabulary or phonological changes. After the dictation practice, the students read aloud the dialogues in pairs. The worksheet was collected every time. At the end of each listening session, participants wrote down their reflections about their listening comprehension. After eight weeks of partial dictation practice, the participants took the post-listening test and answered to the questionnaire.

<table>
<thead>
<tr>
<th>Pre-listening test + Questionnaire</th>
<th>Listening Comprehension &amp; Dictation Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partial dictation practice (8 weeks)</td>
<td>Experimental group: With noise</td>
</tr>
<tr>
<td>Post-listening test + Questionnaire</td>
<td>Listening Comprehension &amp; Dictation Tests</td>
</tr>
</tbody>
</table>

Figure 1. The listening instruction in the experimental and the control groups.

2.4 Data Analyses

The data were analyzed both qualitatively and quantitatively. First, regarding the dictation practice, the number of correct answers in each dictation practice was counted. The students’ comments were analyzed qualitatively. In each group, the student’s comments were categorized into ideas, and then the ideas from each group were compared.

Second, the listening comprehension tests were analyzed quantitatively. Based on the listening test scores, a 2 (Test timing: pre/post) x 2 (noise condition: no noise/with noise) x 2 (group: experimental/control) three-way analysis of variance (ANOVA) was conducted.

Third, the quantitative and qualitative analytical methods were used for the questionnaires. The pre- and post-questionnaires regarding participants’ levels of confidence in their listening comprehension were analyzed using Wilcoxon’s test. The answers regarding the effects of noise, which comprised binary data, were analyzed using the McNemar test. Reflections about their listening comprehension on the tests were analyzed qualitatively.

3. Results

3.1 Partial Dictation Practice

As Table 2 shows, the mean scores of the partial dictation practice were 15.80 in the experimental group, and 16.59 in the control group. The total score was 20 points, so the correct answer rate was about 80% in both groups.
Table 2
The Results of the Dictation Practice During Class

<table>
<thead>
<tr>
<th></th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M$</td>
<td>15.80</td>
<td>16.59</td>
</tr>
<tr>
<td>$SD$</td>
<td>1.80</td>
<td>1.47</td>
</tr>
</tbody>
</table>

The participants’ reflections about their listening comprehension were analyzed qualitatively. The common comments in both groups about what they found difficult were categorized into connected speech, articles, and unknown idioms. There were also some differences between the groups. In the experimental group, participants commented that the ends of words, plural/singular forms, and tense were the difficult parts. In the control group, some students mentioned that the fast speech rate made their listening comprehension more difficult. In the experimental group, few students commented about the noise, even though they listened to the listening materials with noise.

3.2 Listening Tests

Listening comprehension tests. Table 3 and Figures 2 and 3 show the results of the listening comprehension tests. Three-way ANOVA showed that the effects of noise on listening comprehension were statistically significant ($F[1, 48] = 53.828, p < .001, \eta_p^2 = .529$). However, the effects of the test timing and the effects of the group were not significant. The interaction effects were not significant, either. Both groups’ comprehension of the listening questions without noise was statistically significantly higher than their comprehension of the listening questions with background noise.

Table 3
Pre- and Post-listening Comprehension Test Scores

<table>
<thead>
<tr>
<th></th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without noise</td>
<td>With noise</td>
</tr>
<tr>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>Pre-test</td>
<td>8.86 2.53</td>
<td>6.04 1.75</td>
</tr>
<tr>
<td>Post-test</td>
<td>8.86 2.49</td>
<td>6.36 2.77</td>
</tr>
</tbody>
</table>
Dictation tests. Three-way ANOVA showed that test-timing had statistically significant effects on listening comprehension \((F[1, 40] = 18.776, p < .001, \eta^2_p = .319)\). However, the noise and group effects were not significant. The interaction effects were not significant, either. As shown in Table 4 and Figures 4 and 5, the dictation test scores improved from the pre-test to the post-test in both groups.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without noise</td>
<td>With noise</td>
</tr>
<tr>
<td></td>
<td>(M)</td>
<td>(SD)</td>
</tr>
<tr>
<td>Pre-test</td>
<td>24.17</td>
<td>3.10</td>
</tr>
<tr>
<td>Post-test</td>
<td>26.38</td>
<td>2.70</td>
</tr>
</tbody>
</table>
3.3 Questionnaire

Level of confidence in listening comprehension. The answers in each group regarding participants’ level of confidence in their listening comprehension were analyzed separately. The students in both groups answered the questionnaire about their confidence level after taking the listening tests. The differences between the pre- and post-tests were compared.

In the experimental group, the condition without noise showed no differences between pre- and post-questionnaires ($z = -1.154, p = .248$). In the condition with noise, on the other hand, their confidence level showed a statistically significant increase ($z = -2.496, p = .013, r = -.48$). As Table 5 shows, the mean score of their confidence level increased from 1.67 in the pre-questionnaire to 2.00 in the post-questionnaire.

The control group results were similar to those of the experimental group. There was no statistically significant increase between the pre- and post-questionnaires in the without noise condition ($z = -1.414, p = .157 r = -.35$). However, in the condition with noise, participants’ confidence level showed a statistically significant increase ($z = -2.236, p = .025, r = -.56$). As shown in Table 5, the confidence level mean scores increased from 1.56 in the pre-questionnaire to 1.88 in the post-questionnaire.

Table 5

<table>
<thead>
<tr>
<th></th>
<th>Experimental group</th>
<th></th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without noise</td>
<td>With noise</td>
<td>Without noise</td>
</tr>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>Pre-questionnaire</td>
<td>2.11</td>
<td>0.64</td>
<td>1.67</td>
</tr>
<tr>
<td>Post-test questionnaire</td>
<td>2.26</td>
<td>0.59</td>
<td>2.00</td>
</tr>
</tbody>
</table>
The effects of noise on listening comprehension. After taking the pre- and post-tests, participants also answered a question about whether the noise affected their listening comprehension. Their answers to the question in each group was analyzed using McNemar’s test. In the experimental group, the results did not show statistically significant differences between the pre- and post-questionnaires ($p = .289$, $r = .22$). As Table 6 shows, four students answered that their listening comprehension was affected by the noise in the pre-questionnaire but not in the post-questionnaire, which suggests that their perception toward the noise changed after the experiment. However, eleven students felt that their listening comprehension was affected by the noise in the pre- and post-questionnaires, indicating that their perception toward noise did not change after the experiment.

Table 6
Pre- and Post-questionnaires about the Effects of Noise in the Experimental Group

<table>
<thead>
<tr>
<th></th>
<th>Post-questionnaire</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Pre-questionnaire</td>
<td>No</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>

In the control group also, no significant differences were found between the pre- and post-questionnaires ($p = .375$, $r = .20$). As shown in Table 7, the number of students who answered that their listening comprehension was affected by the noise decreased from eleven in total in the pre-questionnaire to eight in total in the post-questionnaire. However, no statistical differences were observed.

Table 7
Pre- and Post-questionnaires about the Effects of Noise in the Control Group

<table>
<thead>
<tr>
<th></th>
<th>Post-questionnaire</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Pre-questionnaire</td>
<td>No</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

When asked why their listening comprehension was affected by the noise, most participants in both groups answered that their concentration level decreased because of the noise (see Table 8). They also mentioned that the sound was interrupted by the noise or that they paid attention to the
noise. For those who answered that their listening comprehension was not affected by the noise, some commented that they were not distracted by the noise. The others stated that they were simply not good at listening, so whether there was noise or not did not affect their listening.

Table 8
Reflections about Their Listening Comprehension

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Yes</td>
<td>My concentration level decreased</td>
<td>33.3%(9)</td>
</tr>
<tr>
<td>The sound was interrupted by the noise</td>
<td>22.2%(6)</td>
<td>19.0%(4)</td>
</tr>
<tr>
<td>I paid attention to the noise</td>
<td>18.5%(5)</td>
<td>9.5%(2)</td>
</tr>
<tr>
<td>No</td>
<td>I was not distracted by the noise</td>
<td>11.1%(3)</td>
</tr>
<tr>
<td>I am simply not good at listening</td>
<td>11.1%(3)</td>
<td>38.1%(8)</td>
</tr>
<tr>
<td>others</td>
<td>3.7%(1)</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. The numbers in the parentheses are the number of students.

4. Discussion

In response to RQ1 (Do EFL learners improve their listening comprehension in noisy conditions after receiving listening instructions with noise?), the results of the listening comprehension test did not show statistical improvements in the learners’ listening comprehension skills. No differences between the experimental group and the control group were observed. In both groups, the listening test scores of the materials with noise were significantly lower than those without noise. These results suggest that the presence of noise negatively affected the learners’ listening comprehensibility measured by the listening comprehension tests. The negative effects of noise on learners’ listening comprehension correspond to the findings of previous studies (Hodoshima et al., 2009; Rogers et al., 2006; Shi, 2010).

In the dictation test, different findings were observed. Like the listening comprehension tests, no differences were found between the two groups. However, test-timing had a significant effect. In both groups, the dictation scores of the post-test were significantly higher than those of the pre-test. The listening comprehension test measured the learners’ listening comprehension skills, and the dictation test measured the learners’ listening perception skills. Therefore, the results of the two kinds of tests used in the current study suggest that the participants improved their listening perception skills but not their listening comprehension skills.

As there were no differences found between the groups, the presence of noise in the listening materials during listening instruction did not affect their listening comprehension nor
their listening perception skills. One possible reason that they improved the dictation test score might be the listening practice’s teaching method. As the listening instruction was conducted using partial dictation practice, which focused more on participants’ listening perception skills, their perception skills might have improved.

Regarding RQ2 (How do listening instructions with background noise affect EFL learners’ perceptions about listening in noisy conditions?), the participants were asked about their perceptions about listening in noise. The results of the questionnaire show that their confidence level in the noise condition increased, but no differences were found between the experimental group and the control group. Participants’ confidence level in the condition without noise did not show improvement. Therefore, these results suggest that the listening instruction positively affected their level of confidence in listening comprehension in the presence of noise.

Regarding the effects of noise, no statistical differences between pre- and post-questionnaires were observed. There were some students who answered that they were affected by the noise in the pre-listening tests but not in the post-listening tests. However, the results showed no significant effects. These results indicate that participants’ perception about the noise did not change after receiving the listening instruction with background noise. As for the reasons that their listening comprehension was affected by the noise, the majority of the participants commented that their concentration level decreased, and their comments also did not change before and after the listening instruction.

Previous studies argue that L1 and L2 listeners’ confidence level in their listening comprehension decreases in the presence of noise (Field, 2008; Richards, 2005). L1 listeners are able to use other information, such as linguistic knowledge or context information, when their confidence level is low. L2 listeners, however, cannot use other information as well as L1 listeners can, resulting in a low degree of comprehension. The results of the current study add supplementary information to past studies. The students’ comments showed that they did not reach a high level of comprehensibility because they were distracted by the noise. The distraction might have resulted in the low comprehensibility. Some learner variables also should be considered. There were a few students who answered that their listening comprehension was not affected by the presence of noise, suggesting that the perception of noise varies among learners.

5. Conclusion

The current study investigated how background noise in listening instruction affected learners’ listening skills and their perceptions about noise. The study showed several findings. First, the effects of listening instruction with background noise on students’ listening skills did not differ from the effects of instruction without noise. The listening tests showed that students’ listening comprehension was negatively affected by the presence of noise and that they improved their listening perception skills after partial dictation practice. However, no differences were found
between the experimental group and the control group. Second, the listening instruction with background noise did not affect students’ perception about the noise. Their confidence level about listening comprehension with the background noise improved in both groups, and no differences were found between the two groups. Most of the learners commented that their concentration level decreased because of the noise, but there were some students who said that the presence of noise did not bother them. Therefore, learner variables were found regarding perceptions about background noise.

Based on the results, two pedagogical implications could be suggested. First, instructors can teach language learners how to listen in the presence of noise. When they cannot rely on the input, other information, such as context information, helps listening comprehension. L2 learners are said not to be good at using related information when they are not confident about the input. Therefore, instructors can teach the usefulness of context information when noise is present. Second, instructors can introduce some listening activities with noise. The effects of listening instructions with and without noise on learners’ listening skills did not differ in the current study. However, most of the students mentioned that their listening comprehensibility was negatively affected by even the moderate degree of noise. In authentic situations, such as when engaging in conversations at a crowded restaurant or listening to an announcement at an airport, language learners need to engage in L2 listening with some background noise. Therefore, it is useful for learners to have the chance to listen to materials with background noise in classrooms so that they can listen to various types of listening material that are similar to those in authentic situations.

Though there were some important findings in the current study, several limitations should be mentioned. First, eight weeks of listening instruction might not have been long enough to observe the effects of listening instruction with noise. If the listening instruction had been longer, other results might have been observed. Second, other listening instruction methods might affect participants’ listening skills differently. In the current study, partial dictation practice was used as listening practice, and there were significant improvements in the learners’ listening perception skills. If the instruction had been conducted using other methods for teaching listening comprehension skills rather than perception skills, participants’ listening comprehension skills might also have improved.

The current study showed some critical findings about the effects of noise on listening skills by focusing on listening instruction with background noise. However, there are still only a few studies that have been conducted about the effects of noise on language learners’ listening skills. Further research is needed using other types or levels of noise with learners with various backgrounds.
Acknowledgements

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References


**Appendices**

**Appendix A: Example of the Dictation Worksheet**

*Note.* Underlined words were blank spaces in the original worksheet.

7. Man: Would you like me to **make us a salad** for lunch? Or I could go and get take-out. Or I guess we could always try that new restaurant on the corner.
   Woman: **Now you’re talking!** I’ll get my coat.
   Narrator: What does the woman mean?

8. Woman: Would you be able to **take a look** at the graphics I’m working on for the exhibition?
   Man: Wow! You did **all these**? You’ve really **come a long way**.
   Narrator: What does the man mean?
Appendix B: Post-Listening Tests Questionnaire

Note. The items were all presented in Japanese.

Regarding the listening materials in the test, please choose and circle the best answer (1 to 4) for each question.

1) ノイズがないリスニング問題について
About your listening comprehensibility of materials without noise

1. 全く聞き取れなかった  2. あまり聞き取れなかった
3. だいたい聞き取れた   4. 全てよく聞き取れた
1. I could not comprehend anything at all  2. I could not comprehend well
3. I comprehended well   4. I could comprehend everything

2) ノイズがあるリスニング問題について
About your listening comprehensibility of materials with noise

1. 全く聞き取れなかった  2. あまり聞き取れなかった
3. だいたい聞き取れた   4. 全てよく聞き取れた
1. I could not comprehend anything at all  2. I could not comprehend well
3. I comprehended well   4. I could comprehend everything

3) 全体について
音声にノイズがあることは、あなたのリスニング理解に影響がありましたか？
Did the presence of noise affect your listening comprehensibility?

1. はい  2. いいえ
1. Yes  2. No

なぜですか？（できるだけ詳しく答えてください）
Why? Please answer as detailed as possible.