# Repeated Presentations of Material: Is It Effective for EFL Students' Listening?

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## Abstract

*Thanks to the advances in digital audio technology, it becomes much easier for language teachers to present any two given points of listening material repeatedly to their students without losing sound quality. However, the effectiveness of repeated material presentations has not yet been proven satisfactorily. An empirical study therefore was conduced to test the following two hypotheses; (1) repeated presentations of material are effective for EFL learners' listening, and (2) the effectiveness of repeated presentations is influenced by i) the length of the sentence, ii) the grammatical complexity of the sentence, and iii) the proficiency level of the learner. The subjects were 148 Japanese college students learning EFL. The results indicated that repeated presentations are indeed effective, although the degree of effectiveness varies with learners' proficiency as well as material length and difficulty. Along with full descriptions of the findings, some pedagogical implications are also mentioned.*

## Introduction

Thanks to the advances in digital audio devices (MD and MP3 players, for example) it has become much easier for language teachers to select any two given points of listening material and to present the selected part to their students repeatedly without losing sound quality. Unfortunately, the effectiveness of this kind of repeated material presentations has been examined only by a few studies. At the phonetic-level, for example, Locke (1970) gave 100 American children German phonemes for a sound imitation task. He had a result that scores improved sporadically rather than incrementally, casting doubt upon effectiveness of repeated presentations. At levels higher than phonemes, to the best of our knowledge, only two studies investigated the effectiveness of repeated presentations. In Suenobu et al. (1986), a total of 100 Japanese university EFL students were presented a 167-word text several times and asked to report in their native language what they comprehended after each presentation. The results indicated positive effect of repeated material presentations. Takahashi, Shina and Takefuta (1988), on the other hand, gave 22 Japanese advanced students of EFL a dictation task of various sentence lengths, and reported that the repeated presentations might not be effective for more accurate listening of material. As this literature review shows, not enough research has been conducted to determine the effectiveness of repeated presentations of material on EFL listening. An empirical study therefore was conducted (a) to determine its effectiveness, specifically at the sentence level, and (b) to explore its relationships with the possible variables (i.e., sentence length, grammatical complexity, and learners' proficiency).

## Hypotheses

The purpose of this study is thus to test the following hypotheses:

1) Repeated presentations of material are effective for EFL listening.
2) The effectiveness of repeated presentations in listening is influenced by
   i) the length of the sentence,
   ii) the grammatical complexity of the sentence, and
   iii) the proficiency level of the learner.

In this study, listening was defined as integrative skills measured by a dictation task.

## Method

### Subjects

The subjects were 148 Japanese university students learning EFL as a required course. They were divided into two groups by their English proficiency. The difference of their English proficiency was confirmed by a 50-item cloze test ($t = 10.50$, df = 76.57, $p = .00$). A total of 56 subjects were in the "Higher Proficiency Group" (HG), while 92 were in the "Lower Proficiency Group" (LG).

### Task

For the listening task, a dictation of 40 sentences was given to the subjects. To examine the influence of sentence length, 40 sentences of four different lengths were included. They were grouped into the sets of ten sentences according to the number of words of which a sentence consisted (i.e., 5, 10, 15, and 20 words). Each group of ten sentences then was categorized into two levels of grammatical complexity, "Easy Sentences" (ES) and "Difficult Sentences" (DS). For example, a group of 10 five-word sentences was constituted of five ES and five DS. The grammatical complexity of the ES and the DS was confirmed to be different on several readability and grammatical complexity scales. The difference was also confirmed by the judgement of two experienced EFL instructors. The sentences were recorded at a natural speed by two American native speakers of English.

### Procedures

The presentation of sentences was arranged in such a way that the presentation order did not affect the results. The task was given during their class time. All the subjects were requested to listen to 40 English sentences five times each. After each presentation, they were asked to transcribe or modify the text. For scoring purpose, the students were also instructed to write down what they heard using different colored ink for each listening, (e.g., first time in black, second time in blue). After each listening, the subjects were given enough time to write.

### Scoring and Analyses

Each word transcribed was scored for the individual reading of each sentence, based on criteria prepared by the researchers. The scoring criteria were made to reflect appropriately the subjects' acoustic processing. The inter-rater reliability between two raters was satisfactorily high at .97. Both total scores and point gains of each presentation were analyzed by using the statistical test of ANOVA with repeated measures in STATISTICA Ver. 5.0J.[1] When a significant difference was found in ANOVA, LSD was administered as a *post-hoc* test.

## Results

### Overview

The HG and the LG were first looked at separately in terms of the effect of frequency of presentation, sentence length, and grammatical complexity. Then, each of those results was compared between the two proficiency groups. Tables 1, 2 and 3 and Figure 1 illustrate the change in scores after each presentation and the results of the statistical tests.

**Table 1. Scores for Each Presentation and Results of ANOVA: HG** ($n = 56$)

| Difficulty | ES | | | | | DS | | | | | F | $p$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | | |
| 5 words (score range: 0-50) | | | | | | | | | | | | |
| M | 31.45 | 36.80 | 38.89 | 40.02 | 40.41 | 20.09 | 28.14 | 30.84 | 32.34 | 32.75 | 403.49 | 0.00 |
| SD | 7.38 | 7.02 | 6.75 | 6.11 | 6.06 | 5.44 | 5.27 | 4.80 | 4.53 | 4.31 | | |
| 10 words (score range: 0-100) | | | | | | | | | | | | |
| M | 32.21 | 49.45 | 57.64 | 62.63 | 64.77 | 25.41 | 37.25 | 44.20 | 47.82 | 50.21 | 561.10 | 0.00 |
| SD | 13.29 | 14.72 | 13.87 | 13.15 | 13.17 | 9.72 | 13.14 | 14.19 | 14.76 | 14.67 | | |
| 15 words (score range: 0-150) | | | | | | | | | | | | |
| M | 38.52 | 56.79 | 68.70 | 75.57 | 80.63 | 18.07 | 42.86 | 52.11 | 58.20 | 62.50 | 677.82 | 0.00 |
| SD | 13.72 | 18.18 | 20.59 | 20.31 | 21.66 | 11.00 | 14.14 | 15.77 | 16.86 | 17.14 | | |
| 20 words (score range: 0-200) | | | | | | | | | | | | |
| M | 37.07 | 59.48 | 74.50 | 85.64 | 93.18 | 33.59 | 50.45 | 62.16 | 69.12 | 74.36 | 820.67 | 0.00 |
| SD | 12.27 | 16.07 | 18.44 | 20.39 | 20.39 | 7.14 | 12.16 | 14.45 | 16.11 | 16.99 | | |

**Table 2. Scores for Each Presentation and Results of ANOVA: LG** ($n = 92$)

| Difficulty | ES | | | | | DS | | | | | F | $p$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | | |
| 5 words (score range: 0-50) | | | | | | | | | | | | |
| M | 22.48 | 29.11 | 31.37 | 32.71 | 33.54 | 14.52 | 23.50 | 26.70 | 28.32 | 29.33 | 681.78 | .000 |
| SD | 7.26 | 7.82 | 7.33 | 7.29 | 6.80 | 5.35 | 6.34 | 5.98 | 5.76 | 5.93 | | |
| 10 words (score range: 0-100) | | | | | | | | | | | | |
| M | 19.09 | 32.21 | 40.18 | 44.97 | 48.03 | 16.11 | 25.70 | 31.78 | 35.64 | 39.55 | 946.54 | .000 |
| SD | 8.88 | 11.49 | 12.93 | 13.45 | 13.62 | 6.87 | 9.61 | 10.48 | 11.33 | 12.172 | | |
| 15 words (score range: 0-150) | | | | | | | | | | | | |
| M | 26.22 | 36.93 | 42.38 | 47.05 | 50.33 | 17.16 | 27.07 | 33.27 | 39.40 | 42.02 | 623.77 | .000 |
| SD | 7.26 | 7.82 | 7.33 | 7.29 | 6.80 | 5.35 | 6.34 | 5.98 | 5.76 | 5.93 | | |
| 20 words (score range: 0-200) | | | | | | | | | | | | |
| M | 22.25 | 38.64 | 49.66 | 57.82 | 63.90 | 20.87 | 32.02 | 39.62 | 45.35 | 49.72 | 595.67 | .000 |
| SD | 9.49 | 12.28 | 16.20 | 19.32 | 20.45 | 7.31 | 10.12 | 13.06 | 14.55 | 15.98 | | |

As seen in Figure 1, the scores of both proficiency groups increased significantly in proportion to the number of repetitions. This was true of all lengths of sentences and both levels of grammatical complexity. The only exception found was the HG's scores between the fourth and the fifth presentations of five-word sentences (in both the ES and the DS), which did not have statistically significant improvement (see Table 3). In most cases, we therefore can say that the scores of both the HG and the LG improved significantly when the material was repeatedly presented.

The exception observed might be because the subjects in the HG wrote down every word they could (although 40 out of possible 50) by the fifth presentation. This would account for the HG's not improving their scores at the fifth presentation.

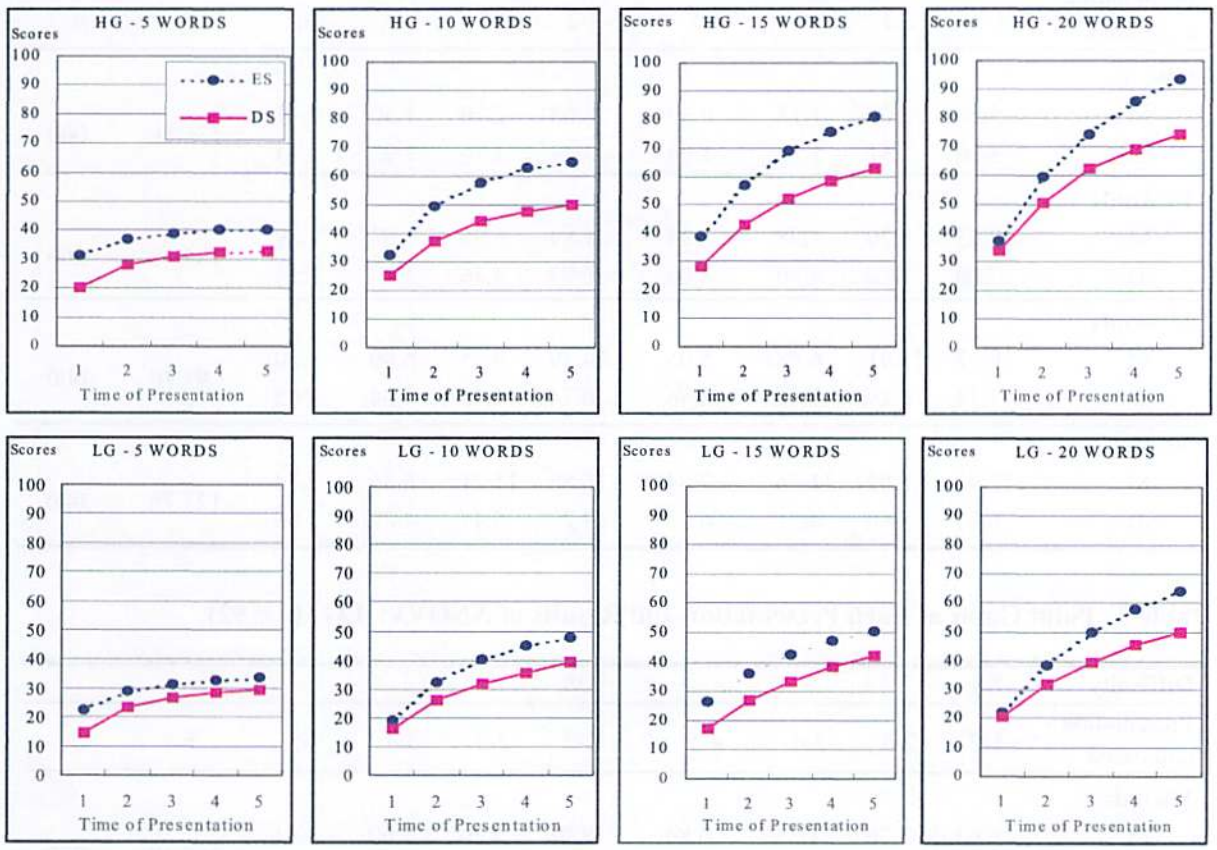


**Figure 1. Changes in scores**

**Table 3. Combinations which did not Reach a Significant Value in LSD**

| | | ES | DS |
|---|---|---|---|
| Presentation compared | | 4 vs. 5 | 4 vs. 5 |
| HG | 5 words | .359 | .338 |

Repeated presentations are thus proved effective no matter how the three variables change. Our next question then is whether repeated presentations have the same degree of effectiveness in the different proficiency groups as well as in the changes of the sentence length and of the grammatical complexity. For this purpose, the data was analyzed in terms of point gains. Tables 4, 5, and 6 and Figure 2 illustrate the change in point gains after each presentation.

**Table 4. Point Gains at Each Presentation and Results of ANOVA: HG** ($n = 56$)

| Difficulty | ES | | | | DS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Presentation compared | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | F | *p* |
| 5 Words | | | | | | | | | | |
| M | 5.36 | 2.09 | 1.13 | 0.39 | 8.05 | 2.70 | 1.50 | 0.41 | 136.16 | .000 |
| SD | 3.30 | 2.61 | 1.78 | 1.04 | 3.48 | 2.70 | 1.92 | 1.14 | | |
| 10 Words | | | | | | | | | | |
| M | 17.23 | 8.20 | 4.98 | 2.14 | 11.84 | 6.95 | 3.63 | 2.39 | 134.08 | .000 |
| SD | 7.00 | 4.26 | 4.40 | 3.00 | 6.97 | 4.46 | 3.27 | 2.51 | | |
| 15 Words | | | | | | | | | | |
| M | 18.27 | 11.91 | 6.88 | 5.05 | 14.79 | 9.25 | 6.09 | 4.30 | 93.76 | .000 |
| SD | 7.14 | 6.19 | 7.18 | 4.56 | 6.74 | 4.73 | 3.64 | 3.05 | | |
| 20 Words | | | | | | | | | | |
| M | 22.41 | 15.02 | 11.14 | 7.54 | 16.86 | 11.71 | 6.86 | 5.34 | 127.78 | .000 |
| SD | 6.93 | 5.60 | 4.71 | 6.23 | 7.27 | 5.47 | 4.22 | 3.58 | | |

**Table 5. Point Gains at Each Presentation and Results of ANOVA: LG** ($n = 92$)

| Difficulty | ES | | | | DS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Presentation compared | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | F | *p* |
| 5 Words | | | | | | | | | | |
| M | 6.63 | 2.26 | 1.34 | 0.84 | 8.98 | 3.20 | 1.60 | 1.01 | 180.19 | .000 |
| SD | 4.52 | 2.48 | 1.93 | 1.81 | 4.61 | 2.54 | 2.33 | 1.59 | | |
| 10 Words | | | | | | | | | | |
| M | 13.12 | 7.97 | 4.79 | 3.07 | 9.80 | 5.87 | 3.86 | 3.91 | 140.43 | .000 |
| SD | 5.42 | 4.63 | 3.31 | 2.69 | 1.90 | 3.46 | 2.69 | 5.03 | | |
| 15 Words | | | | | | | | | | |
| M | 9.72 | 6.45 | 4.67 | 3.61 | 9.90 | 6.21 | 5.13 | 3.61 | 84.04 | .000 |
| SD | 7.46 | 3.97 | 3.56 | 2.99 | 6.34 | 3.31 | 3.66 | 3.12 | | |
| 20 Words | | | | | | | | | | |
| M | 16.40 | 11.02 | 8.15 | 6.09 | 11.15 | 7.60 | 5.76 | 4.34 | 111.09 | .000 |
| SD | 7.21 | 6.46 | 5.07 | 4.98 | 5.44 | 5.04 | 3.78 | 4.16 | | |

**Table 6. Combinations which did not Reach a Significant Value in LSD**

| | | ES | DS | |
|---|---|---|---|---|
| Presentation compared | | 3-4 vs. 4-5 | 2-3 vs. 3-4 | 3-4 vs. 4.5 |
| HG | 5 words | .112 | .001 | .019 |
| | 10 words | .000 | .000 | .128 |
| | 15 words | .081 | .003 | .088 |
| | 20 words | .000 | .000 | .130 |
| LG | 5 words | .263 | .000 | .173 |
| | 10 words | .004 | .001 | .928 |
| | 15 words | .096 | .093 | .018 |
| | 20 words | .002 | .006 | .032 |

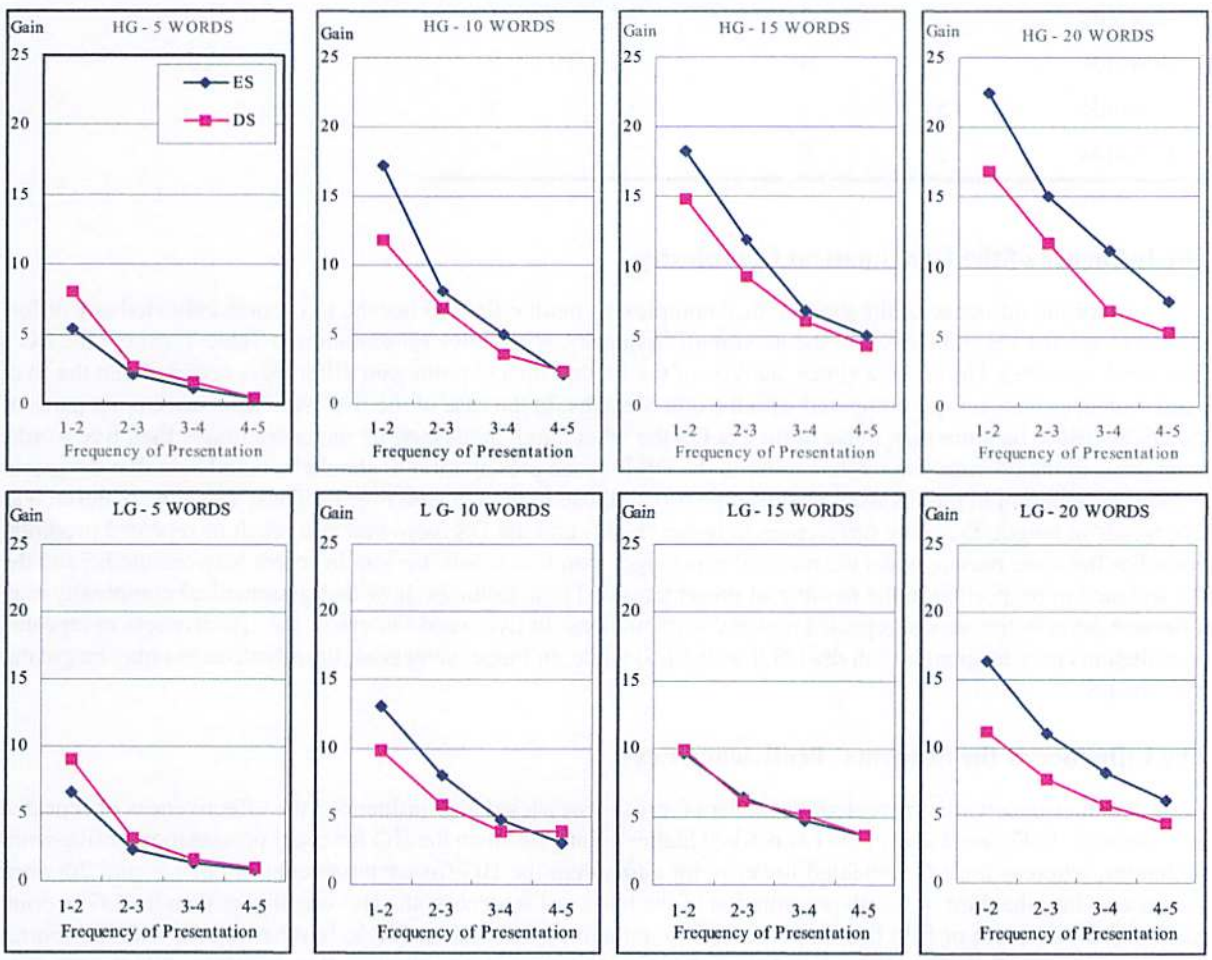


**Figure 2. Changes in point gains**

### The Influence of the Sentence Length

To examine the influence of the sentence length, point gains were examined in terms of the maximum frequency of effective presentation. Maximum frequency of effective presentation is the final presentation in which the students scored at least a three-point gain. The threshold of three points was set based on the scoring criteria. As is seen in Table 5, the maximum frequency of effective presentation increased with the length of the sentences. Although the same degree of maximum frequency (i.e., five times) was listed in some cases, the point gains of longer sentences at fifth presentation were confirmed to be greater (see Tables 4 and 5). This implies that, if the longer sentences were presented more than five times, the maximum frequency of effective presentation might have increased. In addition, no ceiling effect was found in shorter sentences (see scores of five-word sentences in Tables 1 and 2). Based on these results, repeated presentations could have more effect with longer sentences. This finding applies to both levels of grammatical complexity and both groups of the subjects.

**Table 7. Maximum Frequency of Effective Presentation**

| Group | HG | | LG | |
|---|---|---|---|---|
| Difficulty | ES | DS | ES | DS |
| 5 words | 2 | 2 | 2 | 3 |
| 10 words | 4 | 4 | 5 | 5 |
| 15 words | 5 | 5 | 5 | 5 |
| 20 words | 5 | 5 | 5 | 5 |

### The Influence of the Grammatical Complexity

As for the influence of the grammatical complexity, neither the HG nor the LG scores indicated any difference between the ES and the DS in the maximum frequency of effective presentation in Table 7, except the LG's five-word sentences. However, a closer analysis of the ES and the DS point gain differences revealed that the five-word sentences were unique compared with the other lengths. In the case of the five-word sentences, point gains of the DS tended to be more than those of the ES. On the other hand, in the case of sentences longer than five words, point gains in the ES were higher than those in the DS for each presentation. It should be noted here that the scores at each presentation in the ES were always higher than those in the DS (see Fig. 1). Thus, when the material was five words in length, the score differences between the ES and the DS narrowed as a result of repeated presentations. For the same reason, when the material was longer than five words, the gap in scores between the ES and the DS widened in proportion to the number of presentations. These findings show that grammatical complexity may influence the effectiveness of repeated material presentations. In five-word sentences, the effectiveness of repeated presentations may be greater with the DS than the ES, while, in longer sentences, the effectiveness may be greater with the ES.

### The Influence of the Students' Proficiency Level

Another observation revealed the students' proficiency level also influenced the effectiveness of repeated presentations. In Figure 2 above, the LG marked higher point gains than the HG for every presentation of five-word sentences, whereas the LG indicated lower point gains than the HG for each presentation of 15- and 20-word sentences. Until the third or fourth presentation of the ten-word sentences, the HG was higher than the LG in point gains. After the fourth or fifth listening, the LG's point gains exceeded the HG's. In other words, with the shorter sentence material, the LG tended to take more advantage of repeated presentations than the HG, while the opposite seems to be true with the longer sentence material.

The students' proficiency level influenced not only the differences in point gains between the shorter and the longer material, but also those in scores between the ES and the DS. As was mentioned before, the difference in score for each presentation between the ES and the DS became narrower with the five-word sentences, whereas it became wider with the longer sentences. Although both subject groups shared this tendency, the score differences for the HG were always greater than those for the LG under the same condition. The *t*-test results in Table 8 confirmed that those difference were statistically significant. This observation indicates that the HG is more sensitive to sentence difficulty in repeated presentations than the LG. Together with the findings on the sentence length reported in the preceding paragraph, the learners' proficiency may influence the effectiveness of repeated presentations.

**Table 8. Differences in the Scores by the 5th Presentation between ES and DS: HG vs. LG**

| Words in sentences | Diff. between ES and DS | | *t* | df | *p*< |
|---|---|---|---|---|---|
| | HG | LG | | | |
| 5 | 7.66 | 4.22 | 3.42 | 147 | .001 |
| 10 | 14.55 | 8.48 | 3.31 | 147 | .001 |
| 15 | 18.13 | 8.65 | 4.56 | 147 | .000 |
| 20 | 18.82 | 14.18 | 2.35 | 147 | .002 |

The findings of the present study appear to be inconsistent with those by Takahashi et al. (1988), who report that repeated presentations are ineffective. A reason for this inconsistency might also be accounted for by the influence of learner's proficiency. Takahashi et al.'s subjects seemed to have much higher English proficiency level than those of this study. They tested their hypotheses with postgraduates majoring in TESOL as the HG and undergraduates specializing in English as the LG. The higher proficiency of these subjects may have produced the results different from our study.

## Conclusions

Before concluding, a limitation of the present study should be pointed out. In this study, the data of the HG and the LG were analyzed separately. The separation might have blurred the influence of learners' proficiency on the effectiveness of repeated presentations. Further studies thus need to examine the three variables at the same time to better clarify the relationships among them. With this limitation in mind, the following conclusions can be drawn:

1. Repeated presentations of material are effective for EFL listening.
2. The effectiveness of repeated presentations varies with
    a. the length of the sentence,
    b. the grammatical complexity of the sentence, and
    c. the proficiency level of the learner.

Lastly, pedagogical implications are in order. First, the results of this study indicate that repeated material presentations by using such digital devices as MD and MP3 players are effective in language teaching. Second, the findings support the contention made by several researchers (e.g., Oller, 1979), in which at least three presentations of material is advisable for dictation tasks. Furthermore, our study adds two insights on the desirable number of presentations: First, when the presented material is easy and short such as the five-word ES, less than three time of

presentation may be enough for learners (in this context, Japanese intermediate EFL students). Second, when the material is longer, more than three repetitions should improve learners' understanding. The last implication is that teachers should adjust the length and the difficulty of material to the proficiency level of their students. If the material is too difficult, students are unable to efficiently utilize the bottom-up grammatical processing, and the effectiveness of repeated presentations can be limited.[2] At the same time, even though the grammatical complexity is properly adjusted, with too short sentences such as the five-word sentences in this study, there is little redundancy on which learners can rely to understand the sentences. In this situation, learners have limited access to the top-down processing. This might also result in the decreased effectiveness of repeated presentations.

## Notes

1. "Point gain" in this context means the difference between the total scores of the latest and the previous presentations. For example, the point gain for the third presentation is the remainder of the total score after subtracting the total score of the second presentation from the third.

2. By top-down processing, learners make use of the knowledge they possess, such as background knowledge upon the topic, to understand the input. By bottom-up processing, learners construct the meanings from small units, such as phonemes, words and phrases, and understand the whole information (see e.g., Takeuchi, 2000).

## References

Locke, J. L. (1970). The value of repetition in articulation learning. *International Review of Applied Linguistics 8* (2). p. 147-154.

Oller, J. W. Jr. (1979). *Language tests at school: A pragmatic approach.* London: Longman.

Suenobu, M., et al. (1986). Listening comprehension and the process of information acquisition by non-native speakers of English. *International Review of Applied Linguistics 24*(3). p. 239-248.

Takahashi, H., K. Shina, & Y. Takefuta. (1988). Hearing no riron to shido ni kansuru kisoteki kenkyu. (An evaluation of various initial presentations of English material and their effect on listening comprehension) *Language Laboratory* 25. p. 3-13.

Takeuchi, O. (ed.) (2000). *Ninchiteki approach ni yoru gaikokugo kyouiku. (A cognitive approach to foreign language teaching).* Tokyo: Shohakusya.