

琉球大学学術リポジトリ

教科書リスニング教材の認識難易度

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Perceived Difficulty of Textbook Listening Materials

A d a m M u r r a y

Perceived Difficulty of Textbook Listening Materials

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Background

Listening is a critical language skill in second and foreign language acquisition because it is a primary source of input (Field, 2009) and has a “critical effect upon learner motivation” (Field, 2009, p. 335). Morley (1991) warns “the importance of listening cannot be underestimated; it is imperative that it not be treated trivially in second and foreign language curricula” (p. 82).

Foreign language listeners face additional difficulties when trying to understand spoken language because it is necessary to not only accurately process the intended message, but to do this in real-time. In the case of one-way speech acts such as announcements, the listener cannot hear again nor ask for clarification. Often listeners cannot understand everything and may even completely misunderstand. Researchers have long been interested in the sources of difficulty for learners. The major sources of difficulty for learners are:

- a) accent/enunciation/intonation (Chang et al., 2013; Goh, 1997; Vogely, 1998;)
- b) recognition of known words (Goh, 2000; Noro, 2006)
- c) speed (Boyle, 1984; Chang et al., 2013; Flowerdew & Miller, 1992; Goh, 1997; Graham, 2006; Hasan, 2000; Lynch, 2009; Noro, 2006; Vogley, 1998)
- d) vocabulary (Boyle, 1984; Chang et al., 2013; Flowerdew & Miller, 1992; Goh, 1998; Graham, 2006; Noro, 2006).

One way that teachers can help students is to provide input that is at an appropriate level of difficulty. However, choosing listening materials can be challenging. An approach that can be taken mirrors what is done with reading instruction. When rating the difficulty of reading passages, word counts, lexical grades, and readability formulas are used (Poulshock, 2010). He describes a “very easy” passage as being 200-250 words in length with a readability score of grade 3-5, and 95% of the vocabulary is in the British National Corpus (BNC) 1000-word band. On the other hand, an “advanced” passage is 250-300 words, has a readability score of grade 10-11, and 95% of the vocabulary is the BNC 4000-word band. However, in the

case of listening materials, assessing the relative difficulty of a passage is much more difficult. Although a similar approach to that taken with written texts can be taken, listening texts have additional elements that need to be accounted for such as redundancy, speech rate, and information density (Bloomfield et al., 2011).

Another decision that needs to be made is what kind of materials to use. Generally speaking, texts can be divided into two categories: authentic and textbook. Authentic texts are those “whose primary intent is to communicate meaning” (Swaffar, 1985, p. 17). Examples of authentic written texts are newspaper articles and mass market paperbacks. In contrast, the purpose of textbook texts is to “teach language per se rather than to communicate information” (Swaffar, 1985, p. 17). Textbook materials are designed with specific grammatical point(s) or vocabulary in mind. Tomlinson (2012) succinctly describes the difference between the two types of texts, “an authentic text is one which is produced in order to communicate rather than to teach” (p. 162). Regardless of which kind of text is used, attributes such as content, language, vocabulary, grammar need to be considered (Gilmore, 2007, Peacock, 1997; Spelleri, 2002; Tomlinson, 2012. Gilmore (2007) describes the process of evaluating a listening task, “rating a text’s difficulty is not an exact science and is, to some extent, dependent on the learning context in which it is used” (p. 108). Regardless of which type of materials are used, the contents and level of difficulty need to be appropriate for the learners.

Research Questions

The researcher was interested in evaluating the difficulty of existing commercial listening materials from two perspectives. First, how can a classroom practitioner or textbook writer objectively measure the difficulty of a listening passage? Second, how and why do learners perceive the difficulty of a listening passage and how does it influence their performance? To gain insights from these two perspectives, the researcher posed the following three questions:

1. To what extent can readability measures be applied to listening texts?
2. What is the relationship between perceived difficulty and objective difficulty?
3. What is the relationship between difficulty and performance?

Method

Participants

Students enrolled in two sections of a compulsory course called *Pronunciation & Listening* in the autumn semester of 2017 participated in this pilot study. On the outset of the course, all 81 participants completed a background information questionnaire which included:

a) demographic information, b) reported English proficiency, and c) attitudes to the four language skills in English. Table 1 provides an overview of this information. Almost all the students (79) were in their first year of study at the university with only 2 being in their second year. Similarly, almost all the students were approximately 19 years old.

Table 1

Demographic Information About Participants

	Males	Females
Number	26	55
Average Age	19.1 years	19 years
Freshman	26	53
Sophomore	0	2
TOEIC (Average Overall)	561 (<i>SD</i> = 156) (21)	656 (<i>SD</i> = 141) (36)
TOEIC (Average Listening)	305 (<i>SD</i> = 103) (15)	403 (<i>SD</i> = 95) (23)
EIKEN Pre-1	3	8
EIKEN 2	10	34
EIKEN Pre-2	7	10
EIKEN 3	2	2

Note. Many of the students did not report TOEIC scores. The numbers in brackets indicate the number of students who reported.

The students also reported their English proficiency levels as measured by two commercial proficiency tests that are widely used in Japan. The first test was the Test of English for International Communication (TOEIC) which has two sections, reading and listening. In 2017, the mean total score of all Japanese test takers was 517 (*SD* = 180) and 287 (*SD* = 91) for the listening section (Educational Testing Services, 2018). In terms of overall proficiency, the students in this study could be considered comparable to the national average with the males having average total scores of 561 (*SD* = 156) and the females with 656 (*SD* = 141). Regarding listening proficiency, the males were comparable to the national average with an average section score of 305 (*SD* = 103) and the females were slightly better with an average score of 403 (*SD* = 95).

The second test used to report proficiency was 実用英語技能検定 (Test in Practical English Proficiency) commonly referred to as EIKEN. Unlike TOEIC, test-takers are awarded certificates instead of receiving scores. EIKEN has seven grades, with Grade 1 being the highest. Grade 2 is the benchmark for Japanese high school graduates set by The Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) (Eiken Grades, n.d.). Nearly all the students (93%) reported the highest grade of EIKEN certification received. The majority (58%) of the students had Grade 2, followed by 22% with Pre-2 Grade, 14% with

Grade 1, and 5% with Grade 3. When comparing the males and females, the distribution is similar for Pre-Grade 1 (Males: 14%, Females: 15%). However, more females (63%) have Grade 2 than males (45%).

Materials

A domestically produced textbook, *Communication Spotlight: Pre-Intermediate* (Graham-Marr, 2006) was used as the assigned textbook for the course. Conversations about relatable everyday topics such as daily schedules and household activities were used for this pilot study (Appendix 1). The passages were evaluated using two commonly used readability formulas: Flesch Reading Ease (FRE) and Gunning Fog (Table 2). FRE scores range between 1 and 100, with 100 indicating that a passage has high readability or very easy to read. The conversation with the lowest score is “university schedule” with a score of 80.3 which indicates that is “easy to read” while the other conversations are “very easy to read” (Flesh Kincaid Calculator, nd). The Gunning Fog Index Readability Formula (Gunning Fog Index) measures readability in terms of years of formal education needed to understand the text. The scores range between 0 and 20. All these passages have scores less than five which indicates that they are very easy and can be understood by children. However, high readability does not ensure comprehension in an aural form. For this reason, the speed of the recordings needs to be considered. One measurement of spoken language is Words Per Minute (WPM). Because American English is prevalent in teaching materials used in Japan, using the average speaking rate of Americans is appropriate. Barnard (2018) stated that the average conversation rate for American speakers is between 120 and 150 WPM and that the National Center for Voice and Speech reported an average speech of 150 WPM. Most of the textbook conversations are average speed with word rates between 126 and 150 WPM. However, one conversation about a memory stick is a little slower than average (112.6 WPM). Based on these three analyses, all the conversations are at an appropriate level of difficulty for these students.

Table 2*Analysis of Textbook Conversations*

Topic	Flesch Reading	Gunning Fog Index	Number of Words	Duration	WPM
University schedule	80.3	4	147	1:08	129.7
Daily schedule	99	3.7	173	1:17	134.8
Memory stick	100	4.2	122	1:05	112.6
Visiting relatives	92.4	3.5	153	1:01	150.4
Housework	*	*	101	0:48	126.2

Note. WPM = Words Per Minute. The * indicates the passage was too short to be analyzed.

In attempt to predict the difficulty of the conversations, all four rankings were used. Because the three readability scores are measuring the same dimension, they were combined to make a single score which was then combined with the WPM rankings. Although a simplistic approach, half of the weighting was given to readability, and the other half was given to WPM. This combined rating is shown in Table 3, “visiting relatives” was predicted to be the most difficult and “housework” was the easiest.

Table 3*Predicted Difficulty of the Conversations*

Topic	Flesch Reading	Gunning Fog Index	Number of Words	WPM	Combo
University schedule	4	3	3	3	3
Daily schedule	2	2	5	4	4
Memory stick	1	4	2	1	2
Visiting relatives	3	1	4	5	5
Housework	*	*	1	2	1

Note. 1 = easiest, 5 = most difficult.

Procedure

In order to have a recent assessment of the participants’ current level of English listening proficiency, they completed the Listening Vocabulary Levels Test (McLean, Kramer & Beglar, 2015), a listening test that has been demonstrated to have a statistically significant relationship to proficiency as measured by the TOEIC.

Throughout the semester, the participants completed a series of listening tasks. For each listening task, they would do the following 5 steps: a) listen to the text, b) rate the difficulty of the text and their level of personal interest (engagement) using Likert-type scales, c) give comments about text difficulty and level of personal interest in either Japanese or English, d) answer multiple choice questions about the text, and e) complete cloze questions about the text. These steps were repeated for each listening task. Typically, the participants completed

one listening task for each unit of instruction as homework.

After listening to each conversation, and before answering the comprehension questions, the students answered a Likert-type scale question about the difficulty of the conversation. If it was perceived to be difficult, a score of 5 was given. On the other hand, an easy conversation would receive of a score of 1. Table 4 shows the average scores for each of the conversations. “Memory stick” was the hardest with an average of 3.22 and “university schedule” was the easiest with 2.66.

Table 4

Perceived Difficulty of the Conversations

Ranking	Topic	(of 5)
1	University schedule	2.66
2	Daily schedule	2.88
3	Visiting relatives	2.92
4	Housework	3.01
5	Memory stick	3.22

Note. 1 = easiest, 5 = most difficult.

In addition to rating the conversations, students were asked to give a comment in English or Japanese about the rationale for their difficulty rate. About the easiest conversation “university schedule”, one student commented about the speed, “I could listen easily. It’s because the speakers were talking slowly.” The WPM was 129.7 so that could be why this student thought the conversation was slow. Although speed was not specifically mentioned, another student wrote, “It was not so difficult to hear, and words are easy to understand.” However, another student stated that the conversation was difficult, “It was difficult for me to understand technical terms.” This student did not know some of the academic vocabulary used such as subject names, so this was difficult for them.

Although “memory stick” was predicted to be an easy conversation because of having the lowest WPM (112.6) and having high readability scores, many students thought it was difficult and it was ranked the hardest with an average rating of 3.22. Students commented on the vocabulary with statements such as, “difficult vocabulary” and “unknown vocabulary”. They also stated that there were many numbers in the conversation that made it challenging.

Generally speaking, the students did well on the comprehension questions with an overall average of 82.9%. Table 5 shows the students’ performance and the perceived difficulty of each of the conversations. Although the students thought “university schedule” was the easiest conversation, it had the lowest average score of 7.55. As previously mentioned, some students were unfamiliar with the academic vocabulary, and this may have prevented them from answering the questions correctly. In the case of “daily schedule”, their perception

that the conversation was easy (2) and their performance aligned (1) with an average score of 8.82. However, there was a mismatch with “memory stick”, they rated the conversation as the most difficult (5) but did well with an above average score of 8.45.

Table 5

Actual Performance Versus Perceived Difficulty

Ranking	Topic	(of 10)	Perceived Difficulty
1	Daily schedule	8.82	2
2	Housework	8.74	4
3	Memory stick	8.45	5
4	Visiting relatives	7.88	3
5	University schedule	7.55	1

Note. 1 = easiest, 5 = most difficult.

Summary

Readability measures are of limited use when applied to textbook listening texts. Because these are textbook materials, they were all comparable in terms of readability scores and WPM so objectively ranking them may not be possible. Such an approach to evaluating the difficulty may be better applied to authentic texts which have a much wider range of readability and speed.

About the correlation between perceived and objective difficulty, the approach to objectively measure the difficulty did not align well with perceived difficulty. Although speed was considered in the formula, readability scores do not take word levels into account. An additional factor for vocabulary needs to be added.

Perceived difficulty was not a reliable indicator of future performance. As previously mentioned, the students did well on the comprehension questions. All of them are familiar with listening tests and had no problems with the format. Perhaps if questions were changed from a receptive to a productive format, the results would be different.

This study confirms previous research that speed and recognition of words is a challenge for Japanese learners of English. Although the objective measurement of the difficulty of the conversations did not align well with the perceived difficulty, it hints that it is possible with further refinement. The next step is adding a vocabulary dimension to the objective difficulty formula. Also, adding a second measurement of speech rate such as syllables per minute may make it better.

In conclusion, future research needs to be conducted into the specific features of listening texts that are considered easy or difficult. Instead of using a number of texts, research using modified versions of the same text could provide valuable insights. Regardless of what

approach is taken, students need appropriate materials to help the achieve high levels of listening proficiency.

Notes

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References

- Bloomfield, A. N., Wayland, S. C., Blodgett, A., & Linck, J. (2011). *Factors related to passage length: Implications for second language listening comprehension*. In L. Carlson, C. Holscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 2317-2322). Austin, TX: Cognitive Science Society.
- Boyle, J. P. (1984). Factors affecting listening comprehension. *ELT Journal*, 38(1), 34–38. <https://doi.org/10.1093/elt/38.1.34>
- Chang, A. C.-S., Wu, B. W.-P., & Pang, J. C.-L. (2013). Second language listening difficulties perceived by low-level learners. *Perceptual and Motor Skills*, 116(2), 415–434. <https://doi.org/10.2466/22.23.PMS.116.2.415-434>
- Eiken Grades. (n.d.). Eiken Foundation of Japan. <https://www.eiken.or.jp/eiken/en/grades/>
- Education Testing Service. (2018). 2017 Report on Test Takers Worldwide. <https://www.ets.org/s/toEIC/pdf/2017-report-on-test-takers-worldwide.pdf>
- Field, J. (2009). *Listening in the language classroom*. Cambridge: Cambridge University Press.
- Flowerdew, J., & Miller, L. (1992). Student perceptions, problems and strategies in second language lecture comprehension. *RELC Journal*, 23(2), 60–80. <https://doi.org/10.1177/003368829202300205>
- Flesch Kincaid Calculator - Flesch Reading Ease Score (n.d.). <https://charactercalculator.com/flesch-reading-ease/>
- Gilmore, A. (2007). Authentic materials and authenticity in foreign language learning. *Language Teaching*, 40, 97-118. <https://doi.org/10.1017/S0261444807004144>.
- Goh, C. (1997). Metacognitive awareness and second language listeners. *ELT Journal*, 51(4), 361–369. <https://doi.org/10.1093/elt/51.4.361>
- Goh, C. C. M. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28, 55–75. [https://doi.org/10.1016/S0346-251X\(99\)00060-3](https://doi.org/10.1016/S0346-251X(99)00060-3)
- Graham, S. (2006). A study of students' metacognitive beliefs about foreign language study and their impact on learning. *Foreign Language Annals*, 39(2), 296–309. <https://doi.org/10.1111/j.1944-9720.2006.tb02267.x>

- Graham-Marr, A. (2006). *Communication spotlight: Pre-intermediate*. (2nd ed.). Tokyo: ABAX.
- Gunning Fog Index - Gunning Fog Score (n.d.). <https://charactercalculator.com/gunning-fog-index>
- Hasan, A. S. (2000). Learners' perceptions of listening comprehension problems. *Language, Culture, and Curriculum*, 13(2), 137–153. <https://doi.org/10.1080/07908310008666595>
- Lynch, T. (2009). *Teaching second language listening*. New York: Oxford University Press.
- McLean, S., Kramer, B., & Beglar, D. (2015). The validation of a listening vocabulary levels test. *Language Teaching Research*, 19(6), 741–760. <https://doi.org/10.1177/1362168814567889>
- Morley, J. (1991). *Listening comprehension in second/foreign language instruction*. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (2nd ed., pp. 81–106). New York: Newbury House.
- Noro, T. (2006). Developing a construct model of “Listening Stress”: A qualitative study of the affective domain of the listening process. *ARELE: Annual Review of English Language Education in Japan*, 17, 61–70. https://doi.org/10.20581/arele.17.0_61
- Peacock, M. (1997). The effect of authentic materials on the motivation of EFL learners. *ELT Journal*, 52, 144–156. <https://doi.org/10.1093/elt/51.2.144>.
- Poulshock, J. (2010). Extensive graded reading in the liberal arts and sciences. *Reading in a Foreign Language*, 22(2), 304–322.
- Spelleri, M. (2002). From lessons to life: Authentic materials bridge the gap. *ESL Magazine*, 5(2), 16–18.
- Swaffar, J. K. (1985). Reading authentic texts in a foreign language: A cognitive model. *The Modern Language Journal*, 69(1): 15–34. <https://doi.org/10.1111/j.1540-4781.1985.tb02521.x>
- Tomlinson, B. (2012). Materials development for language learning and teaching. *Language Teaching*, 45(2), 143–179. <https://doi.org/10.1017/S0261444811000528>
- Vogely, A. J. (1998). Listening comprehension anxiety: Students' reported sources and solutions. *Foreign Language Annals*, 31(1), 67–80. <https://doi.org/10.1111/j.1944-9720.1998.tb01333.x>

Appendix

Sample Conversation: University Schedule

A: What's your schedule like?

B: Pretty good. I don't have any classes on Monday.

A: Really? That's a great schedule. You have a long weekend every week.

B: Yeah. Well, I planned it that way. The other days are a little busy. I have three classes on Tuesday, four classes each on Wednesday, Thursday and Friday.

A: So what classes are you taking this semester?

B: I have a couple of easy ones but the rest are pretty hard, you know, calculus, mechanical engineering.

A: What are your easy classes?

B: Well, I'm taking a couple of electives. Uhh, *Introduction to Sociology* and *Introduction to Psychology*.

A: Are those easy?

B: Well, the course follows the textbook. So if you do the reading, you know, read the textbook, it's not so bad. Plus there are no term papers, just two tests, a midterm and a final.

A: No term paper?

B: No, just the two tests.

A: That's pretty easy.

教科書リスニング教材の認識難易度

マレー・アダム

本論文では、英語科目「発音とリスニング」を受講する 81 名の日本人大学生を対象とした 1 学期にわたるパイロットスタディについて概観する。使用したリスニング教材は、日本国内で出版された一般的な教科書に掲載されているものであり、教材の難易度は、従来の読みやすさに加え、発話速度(WPM)を用いて客観的に評価を行ったものである。また、学生が主観的に教材の難易度を評価し、その理由を述べた。最後に、リスニングタスクにおける学生のパフォーマンスと教材の難易度との比較を行った。

結果によると、客観的な難易度と学生が認識する難易度は一致せず、リスニング教材の側面についてさらなる考慮が必要であることが確認された。更に、学生の難易度は、その次のリスニングタスクで成功するか否かを必ずしも予測するものではないことが判明した。本研究は、日本人英語学習者にとって、話し言葉の速度とその語彙認識が課題であるという先行研究を再確認するものとなった。

