



Japanese Extensive Reading: Reading Goals and Learner Perceptions

Jeff Peterson

Brigham Young University

ABSTRACT

Extensive reading (ER) research has suggested that completing the equivalent of 7,200 standard words of extensive reading per week facilitates substantial reading rate gains. Research has also suggested that 100 minutes per week is sufficient to complete this goal for most English language learners (Beglar & Hunt, 2014). However, experimental and quantitative studies have yet to fully investigate the feasibility of such large amounts of ER in a limited amount of time for learners of languages other than English. The goal of this study was to investigate the feasibility of a 7,200-standard-word (12,000-character) per week reading goal for intermediate-level learners of Japanese as a foreign language (JFL). Another aim was to ascertain learner perceptions of ER that followed strict adherence to ER principles. Using a quantitative single-subject study and observation design, I monitored eight intermediate-level learners of Japanese engaging in ER for over two and a half to four months. Results indicated that given 100 minutes per week, a reading goal of 12,000 characters (7,200 standard words) is likely feasible for most intermediate JFL learners and that participants had overwhelmingly positive attitudes toward ER.

INTRODUCTION

The past few decades have seen a surge in research into the effects of extensive reading (ER) on second language acquisition. Many studies report that engaging in ER yields benefits, including faster reading rates (McLean & Rouault, 2017). Despite this result, little has been done to determine the amount of ER needed to achieve reading gains. One recent study has reported on how much reading may be necessary for substantial reading rate gains (Beglar & Hunt, 2014). However, the amount of reading needed for these gains has yet to be further examined. Furthermore, studies that show reading rate gains from ER tend to focus on learners of English as a second or foreign language (ESL/EFL; Peterson, 2019b). An increasing number of pedagogical studies have also reported on how ER programs can be implemented in Japanese as a foreign language (JFL) classrooms and on students' positive reactions to ER.

Studies have yet to fully explore and provide quantitative data showing what learners are feasibly able to achieve through ER. This lack of full exploration is indicated by an expansive review of second language (L2) Japanese research (Y. Mori & Mori, 2011), which covered over 200 empirical studies and showed that only token attention was given to ER. This article presents a survey of learner perceptions of ER in a strictly monitored environment as well as a preliminary investigation of the feasibility of an ER goal of 12,000 characters (7,200 standard words) per week.

The following review of literature presents ER research that has been conducted in both ESL/EFL and JFL contexts.

Extensive Reading Goals and Reading Rate Gains

ER is an approach to teaching reading in the foreign-language context that allows learners to read copious amounts of easy material of their choosing. It is widely accepted that ER is defined as reading that follows Day and Bamford's 10 principles (Day, 2018; Day & Bamford, 2002). Compared with studies focusing on other areas within ER research, studies investigating ER reading goals and the effect of ER on reading rate are less common. An examination of recent articles indicates that only 28 published articles report changes in reading rate over the course of an ER program, and those articles focus exclusively on English ER (see Nakanishi [2015] and Peterson [2019b] for a review). Furthermore, to my knowledge, only one of these recent studies discusses a reading goal or a specific amount of reading for achieving substantial reading rate gains (Beglar & Hunt, 2014).

Prior to Beglar and Hunt's 2014 study investigating the number of standard words needed to produce considerable reading rate gains, Beglar et al. (2012) laid the groundwork for the study: Over the course of one academic year, the authors investigated the effects of pleasure reading and intensive reading (IR) on 97 first-year Japanese university ESL/EFL students' reading rates. Participants in their study were assigned to one of four groups, which consisted of three pleasure reading groups and one IR group. The main difference between the IR group and the other groups was that the pleasure reading groups engaged in out-of-class pleasure reading and produced short reading reports. Using a reading rate and comprehension test, Beglar et al. assessed participants' reading rate at the beginning and end of the study. Although no statistically significant gain in reading rate was found in the IR group, all pleasure reading groups read significantly faster on the posttest. Beglar et al. found that statistically, the pleasure reading groups' reading rate gains were significantly higher than the IR group's reading rate gains; their study suggests that pleasure reading (and by extension ER) may lead to faster reading rates among L2 learners.

Using the pleasure reading data from Beglar et al. (2012), Beglar and Hunt (2014) continued their research, investigating how many standard words (i.e., number of six-character units) must be read to produce adequate reading rate gains. To address the number of standard words required to observe reading rate gains, participant data were split into five percentile ranks based on participants' reading rate gain in Beglar et al. (2012). Beglar and Hunt (2014) found that the group with the greatest gain in reading rate also read the most, reading 208,607 standard words over 28 weeks. Based on these results, they suggested that language learners who read approximately 200,000 standard words over 28 weeks (\square 7,200 standard words per week) from level-appropriate texts are likely to achieve substantial reading rate gains. The authors also suggest that most learners can accomplish this goal by reading 100 minutes per week. These results, although intriguing, require further examination to determine whether a goal of 7,200 standard words per week is feasible within 100 minutes for learners of differing levels and target languages. The present study investigated this question directly by setting reading goals with participants and recording the number of characters (not character units) and number of minutes each participant read. In the current study, a 12,000-character (7,200-standard-word) per week reading goal was set and was calculated using the Japanese word-to-character conversion discussed in the procedure section.

Learner Perceptions of Extensive Reading

Many studies have examined the role of ER in the motivation of second language learners, and overwhelmingly show that learners have positive perceptions of ER (Hitosugi & Day, 2004; S. Mori, 2004; Nishino, 2007; Taguchi et al., 2004). Motivation is one of the most researched benefits of ER. Some positive effects of ER described in previous studies include increased desire to read, increased enjoyment from reading, and higher levels of confidence in one's ability to read.

Although many perceptions studies have been done in the ESL/EFL setting, far fewer have been conducted with learners of Japanese. Among the handful of studies that have examined the perceptions of learners in the JFL setting, Leung (2002) is one of the earliest. In her study, Leung completed 20 weeks of ER and found that the activity helped her feel comfortable reading and promoted self-confidence. Others have found that ER may lead to positive perceptions of Japanese learning, including a higher degree of enjoyment in coursework, motivation to do well in class, and a desire to read more (Hitosugi & Day, 2004; Tabata-Sandom & Macalister, 2009). Participants in a recent study reported more favorable attitudes toward pleasure reading when compared to speed reading and IR (Tabata-Sandom, 2017).

Another recent qualitative case study explored changes in ER motivation among nine high school JFL students over 5 to 7 months (de Burgh-Hirabe & Feryok, 2013). Participants kept a record of what they read and participated in 30- to 60-minute interviews with the researchers. Results of the study indicated that for four of the participants, motivation to engage in ER increased, while for three it decreased, and for two it remained stable. De Burgh-Hirabe and Feryok concluded that more effective ER programs are likely to (a) have a wide range of materials available for participants to read and (b) make ER mandatory. The current study implemented these suggestions. Furthermore, de Burgh-Hirabe and Feryok's findings indicated that learners differ in their approach to ER and that different factors may affect the degree of reading completed by individual learners. Because learners in their study were not strictly monitored while engaged in ER, it is unclear whether the participants conducted ER as instructed or whether they deviated from those rules. This is a difficult hurdle to overcome when ER is assigned as homework. These results further suggest the need for constant communication and confirmation of learners' actual approach in conducting ER. In the current study, I was able to control participants' ER through constant close monitoring of all ER sessions completed.

Although the studies discussed here show considerable benefits to learners who read at length, few studies have focused on the feasibility of lengthy reading goals. While many studies have focused on motivation or learner attitudes, these studies have concentrated almost solely on English language learners. Further research is needed to show the feasibility of lengthy reading goals as well as to examine learner perceptions of ER in the JFL context. In this study, I explored what a feasible reading goal for intermediate-level JFL learners may be. I also examined learner perceptions of ER. The following research questions are addressed in this study:

- RQ1. How feasible is completing a reading goal of 12,000 characters (7,200 standard words) within 100 minutes per week for intermediate-level JFL learners engaged in ER?
- RQ2. What are intermediate-level JFL learners' reading rates prior to and following engagement in ER with a 12,000-character reading goal?
- RQ3. What are intermediate-level JFL learners' attitudes towards ER?

METHODOLOGY

Single-Subject Study and Observation Design

A single-subject study and observation design research method was used in the current study. Under single-subject designs, “data are collected and analyzed for only one subject at a time;” single-subject designs are often used when group designs are not feasible or are inappropriate in answering a researcher’s questions (Fraenkel et al., 2019, p. 295). Group designs are particularly difficult when lengthy observation is part of the data collection method, as was the case for the current study. Fraenkel et al. (2019) explain that single-subject designs are frequently used when “intensive data collection on a very few individuals makes more sense” than on large groups (p. 295).

In group comparison designs, it is difficult to thoroughly enforce the rules and principles of ER (see Awano et al. (2012) and Day and Bamford (2002) for a list of rules and principles). The design of the current study included my constant physical presence during ER sessions, allowing me to monitor participants’ ER to control for possible variance in approach to ER and adherence to ER guiding principles and rules. The approach of constant monitoring to enforce ER principles in the current study is of particular importance because previous studies have often failed to control for differences in how learners actually conduct ER.

Participants

Nonprobability sampling was used in the current study to identify potential participants. This sampling approach was necessary to identify individuals who met certain language proficiency criteria (i.e., intermediate-level JFL learners), as well as to recruit those who could commit to the study’s demanding requirements. Participants were recruited using public posts on Facebook, flyers, and word of mouth. All eight participants were volunteers living around Brigham Young University (BYU) and Utah Valley University. Table 1 is a summary of participants’ demographic information (names are pseudonyms).

Table 1. Participant Demographic Data

Participant	Age	Sex	First Language	Enrolled in Japanese Course	Learner Type
Aiden	21	Male	English	No	Immersion
Alexander	24	Male	English	No	Immersion
Amber	27	Female	English	No	Classroom
Bruce	33	Male	English	No	Immersion
Caden	18	Male	English	Yes	Classroom
Liam	42	Male	English	No	Immersion
Noah	23	Male	English	No	Self-taught
Sophia	22	Female	English	Yes	Immersion

Two main types of learners participated in this study: classroom and immersion learners. Classroom learners had studied Japanese starting in first-semester Japanese. Immersion learners

had mainly studied Japanese as part of their missionary service for The Church of Jesus Christ of Latter-day Saints, during which they lived in Japan and used Japanese daily for 16–22 months.

During the study, Caden and Sophia were enrolled in intermediate-level courses at BYU. No other participants were enrolled in a Japanese course throughout the study. For all non-enrolled participants except Liam, ER was the only Japanese language learning activity in which they engaged. Liam reported studying different aspects of Japanese (vocabulary, reading, etc.) on his own for at least one hour a day during the study.

Procedure

ER Sessions

Throughout the study, I collected detailed ER data on the participants, with each participant effectively becoming a unique single-subject study. At the beginning of the study, participants filled out a demographic survey, completed Japanese vocabulary size and proficiency tests, and were given an explanation of the intervention (i.e., ER and its principles).

Participants met with me to engage in ER and fill out reading logs for approximately one hour, two to three times a week, for an average of 14.5 weeks. The number of weeks depended on each participant's availability. This approach of meeting with participants for 2–3 hours a week is similar to meeting with students enrolled in a three-credit-hour course in American universities. The participants in this study did not complete ER activities outside of the study, which allowed me to monitor participants and ensure that adherence to ER best practices were being upheld. I displayed a list of the principles in a picture frame on a table during each ER meeting to help participants remember and follow the ER principles and rules taught to them at the beginning of the study.

Because participants had differing schedules, times and locations of weekly ER sessions were determined on a case-by-case basis. Few participants were able to complete the multi-week procedure due to the exceedingly time-intensive nature of the study. Depending on the participant, each learner engaged in the study for between 10 and 18.5 weeks.

The ER Goal

Beglar and Hunt (2014) suggested that a goal should be set to read 200,000 six-character standard words over 28 weeks in order to achieve substantial reading rate gains through ER. To test the feasibility of such a goal among intermediate-level JFL learners, the participants and I discussed and set a comparatively equal goal of 12,000 Japanese characters per week. Carver (1972) originally determined standard word length in English by summing all letters, spaces, and symbols across four paragraphs of text and then dividing that number by the number of words in the text. This number produced an average of six character-spaces per word. In order to calculate the length of standard words in Japanese, I found the length of the first 20,000 most frequent words in Japanese based on Matsushita's (2011) Vocabulary Database for Reading Japanese. The weighted average length of the 20,000 most frequent Japanese words was then calculated and found to be 1.66 characters per word. Using this average, the current study calculated a minimum character (not character unit) reading goal of approximately 12,000 characters (7,200 standard Japanese words) per week. This is a transformation of Beglar and Hunt's 200,000-standard-word

goal— $[(200,000 \text{ standard words} * 1.66 \text{ characters on average per Japanese word}) / 28 \text{ weeks}]$ □
12,000 characters / week].

Reading Logs

I kept reading logs to record the amount of time participants engaged in reading and the number of characters each participant read throughout the study. The number of characters each participant read is reported using precise numbers, not approximations. To calculate the precise number of characters each participant read, I created text files for each passage or book read throughout the entire study and used the tools built into my Reading Fluency Solutions web application (Peterson & Peterson, 2017, 2018). After a participant read a passage or book, I updated the participant's reading log with the appropriate character and word counts. When a participant read only a portion of a passage or book, the participant recorded how far he or she got in the reading log, and I adjusted the character and word count for that entry accordingly. As participants' reading logs were kept in a digital spreadsheet format using Google Sheets, the running total of characters read by participants was constantly updated.

Assessment Data and Analyses

I also collected extensive reading rate data throughout the study. Five reading rate pretests and posttests were conducted for each level of difficulty (both elementary- and intermediate-level tests). Since inferential statistics were inappropriate given the small number of participants that completed the study, I used descriptive statistics to show trends in reading rate. Thus, increases across reading rate tests were considered evidence of an effect of ER on reading rates as well as a higher degree of language knowledge automaticity.

Materials

Reading Materials for ER

Participants were given access to Peterson's (2019a) Japanese Extensive Reading Resources Database, which contains detailed information such as difficulty levels and character counts for 432 books or passages, and to Peterson and Yuasa's (2019) General Database of Japanese Pleasure Reading Resources. Table 2 provides a summary of the texts available to participants, most of which were in a digital format.

Table 2. Texts Available

Type	Number Available	
	Level 0	43
	Level 1	62
	Level 2	78
Graded Readers	Level 3	35
	Level 4	33
	Level 5	2
	Total	253
	[In print	152 (60%)]
Folk tales	3,135	
Children's stories	>2,234	
Manga, blogs, <i>keitai</i> (mobile) novels, news, literature in the public domain	Numerous	
Total:	>5,622	

Questionnaires

Learner perceptions of personal reading speed as well as of the utility and enjoyment experienced while engaged in ER was assessed through pre- and post-study questionnaires. The following are the 10 Likert scale questions posed on the pre-study questionnaire (questions 1–10) and the post-study questionnaire (questions 1–20). The questions assessed participants' perception of the reading approaches they engaged in prior to and following the study and their perceptions of reading in Japanese. These questions are based mainly on Day and Bamford's (2002) 10 principles for teaching ER.

- 1 and 11. Most of what I read in Japanese is easy reading material.
- 2 and 12. I know where to find a variety of Japanese reading material on a wide range of topics.
- 3 and 13. Most of what I read in Japanese is what I personally choose to read.
- 4 and 14. Most of what I read in Japanese is what I personally choose to read.
- 5 and 15. I read in Japanese as much as possible.
- 6 and 16. When I read in Japanese I most often read for pleasure.
- 7 and 17. I find reading in Japanese to be a reward in itself.
- 8 and 18. My reading speed in Japanese is usually faster rather than slower.
- 9 and 19. My Japanese reading is most often done individually and silently.
- 10 and 20. I have time and am able to read 2,400 characters (about 3 single-spaced pages) of Japanese each weekday.

These 10 questions were repeated twice on the post-study questionnaire. On the first set of 10 questions (questions 1–10) on the post-study questionnaire, participants answered based on having completed the study. On the second set of 10 questions (questions 11–20), participants reflected on their reading habits prior to the study and answered based on their pre-study reading. Questions 21–40 on the post-study questionnaire were adapted from Lin et al.'s (2012) study.

These questions assessed participants' increase in enjoyment (questions 21–23, 39), motivation (25–27, 40), and reading ability (29–33) from ER as well as their attitude towards ER (24, 28, 34–38).

The following are Likert scale questions 21–40 posed on the post-study questionnaire:

21. I like extensive reading.
22. I like the calm setting of an extensive reading session.
23. I like that extensive reading allows me to choose my own reading materials.
24. Extensive reading was helpful in studying/learning Japanese.
25. I would like to continue extensive reading in the future.
26. I am convinced that I will definitely read more in the future.
27. I believe that more learners should be given the chance to experience extensive reading.

During extensive reading I:

28. can concentrate/focus better.
29. find that I have more time to figure out words.
30. find that I recognize more words.
31. understand better what I am reading.
32. need less help than I used to.
33. feel that I can read better.
34. feel more comfortable because no one is listening to my reading.
35. feel more confident because no one is listening to my reading.
36. generally feel more relaxed.
37. do **NOT** feel that reading is difficult.
38. do **NOT** feel pressured/stressed out.
39. find that reading is enjoyable.
40. feel motivated to read more.

Measurement

Vocabulary Size Assessment

Participants' vocabulary size was assessed using the highly reliable (Rasch reliability estimate = .93) Vocabulary Size Test for Reading Japanese (Matsushita, 2012a, 2012b). Table 3 below summarizes the pre-study vocabulary sizes of participants.

Table 3. Participant Vocabulary Size

Participant	Vocabulary Size
Alexander	11,600
Amber	9,900
Caden	9,100
Sophia	6,700
Aiden	6,100
Liam	5,900
Noah	4,700
Bruce	2,400

Proficiency Assessment

Each participant completed the Japanese Computerized Adaptive Test (J-CAT) in a proctored environment to determine their proficiency level. Table 4 below summarizes participants' J-CAT results with proficiency levels based on the official March 2020 J-CAT interpretation table (J-CAT Project Team & International Student Center at University of Tsukuba, 2020).

Table 4. Participant J-CAT Results

Participant	Proficiency Level	Total	Listening	Vocabulary	Grammar	Reading
Amber	IH	227	63	61	44	59
Alexander	IH	221	63	50	55	53
Caden	IH	200	56	45	47	52
Aiden	I	184	64	34	44	42
Bruce	I	166	61	34	45	26
Sophia	I	155	55	40	29	31
Liam	PI	133	20	50	32	31
Noah	PI	106	12	34	29	31

Note. IH: Intermediate-High; I: Intermediate; PI: Pre-Intermediate

Reading Tests

Throughout the study, I used reading tests to track learner reading rate (calculated in characters per minute [CPM]). Participants took each test individually with me using unpracticed reading passages. Two levels were tested: a criterion level of intermediate as determined by jReadability (Lee & Hasebe, 2016) and elementary. Intermediate level tests had a 98%-word level of 4,000 headwords and elementary tests were set to 1,285 headwords. The reading passages were adapted texts from a variety of sources, including intermediate-level textbook readings and graded reader texts.

RESULTS AND DISCUSSION

Research Question 1

RQ1. How feasible is completing a reading goal of 12,000 characters (7,200 standard words) within 100 minutes per week for intermediate-level JFL learners engaged in ER?

This section provides data collected on the number of characters read by each participant each week during the study and addresses Research Question 1. Research Question 1 is a key question to ask in determining whether, in the JFL setting, Beglar and Hunt's (2014) assertion that an equivalent goal of 7,200 standard words per week should be set to achieve adequate reading rate gains is feasible within 100 minutes per week. Table 5 summarizes the number of characters participants read during each week of their participation as well as the amount of time they spent reading (formatted as hours:minutes or h:mm). The times shown in Table 5 are the amounts of time participants actually spent reading and do not include time spent looking for books to read, changing books, or speaking with the researcher.

The records kept of participants' ER indicated that the average number of characters read by participants each week was 15,126 (9,112 standard words). The highest average was from Caden at 19,180 characters read. The lowest average was from Bruce at 11,838, only 162 characters (69 standard words) below the 12,000-character (7,200-standard-word) goal. Over the course of the study, Aiden read an average of 12,345 characters per week in an average of 89 minutes. Other participants had similar results, with Alexander, Caden, Noah, and Sophia also reading for an average of 92 minutes per week and reading over 12,000 characters of ER per week on average. Amber and Bruce read an average of 116 minutes a week. Amber read an average of 18,631 characters of ER per week, and Bruce approached an average of 12,000 characters per week. Finally, the amount of time Liam read per week was the highest, at 165 minutes. Liam read an average of 14,626 characters per week.

The slowest reading pace during any one week was 65 CPM, the pace at which Liam read during his second week. At that rate, it would take 180 minutes to read 12,000 characters. The next-slowest pace was Bruce's during his first week, at 78 CPM. At this rate, it would take 150 minutes to read 12,000 characters.

Table 5. Participants' Weekly Reading

Week	Aiden		Alexander		Amber		Bruce		Caden		Liam		Noah		Sophia	
	Characters	Time	Characters	Time	Characters	Time	Characters	Time	Characters	Time	Characters	Time	Characters	Time	Characters	Time
1	4,453	0:46	9,682	1:30	23,687	2:10	5,703	1:13	7,854	0:37	4,713	0:59	9,384	1:28	19,231	1:44
2	19,292	2:34	19,356	2:10	26,687	2:24	12,184	1:59	28,189	2:15	10,996	2:50	17,355	2:13	27,153	2:23
3	15,812	1:58	5,180	0:47	25,537	2:31	14,141	2:08	24,116	2:06	18,407	3:29	20,550	2:18	14,529	1:18
4	18,406	2:07	-	-	20,026	2:10	12,796	1:53	27,239	1:59	24,723	4:28	23,670	2:35	22,231	2:07
5	10,723	1:01	-	-	22,368	2:29	12,562	2:02	23,942	1:37	21,966	4:20	7,892	0:45	14,976	1:14
6	17,515	2:08	18,287	2:38	16,386	1:35	14,138	2:07	21,525	1:55	13,212	2:34	11,425	1:14	23,841	2:05
7	11,474	1:15	15,051	1:54	28,660	2:46	13,147	1:58	27,877	2:02	21,347	3:38	14,440	1:39	15,474	1:29
8	15,884	1:55	19,908	2:19	17,788	2:00	15,767	2:27	19,864	1:23	7,418	1:13	15,334	1:30	12,279	1:14
9	6,479	0:42	24,949	2:22	13,331	1:30	-	-	14,075	1:14	14,658	2:46	6,835	0:44	23,071	1:44
10	17,309	2:00	9,145	0:38	6,887	0:43	13,900	2:13	5,149	0:28	19,749	3:47	6,059	0:40	7,229	0:37
11	17,941	2:01	15,016	1:53	8,619	1:02	7,137	1:08	17,756	1:34	13,582	2:14	19,378	1:54	13,840	1:18
12	7,484	1:01	4,173	0:32	15,895	1:46	6,944	1:13	11,562	1:02	9,298	1:43	-	-	23,078	2:00
13	11,684	1:50	10,221	1:16	14,269	1:43	16,190	2:25	18,878	1:36	20,606	3:35	-	-	-	-
14	5,524	0:41	11,222	1:22	22,202	2:30	9,690	1:48	20,487	1:42	15,506	2:50	-	-	-	-
15	10,128	0:57	13,741	1:33	20,794	2:28	11,438	1:47	-	-	8,330	1:33	-	-	-	-
16	9,828	1:17	7,364	0:52	-	-	-	-	-	-	18,755	3:45	-	-	-	-
17	9,930	0:53	-	-	19,465	2:01	-	-	-	-	5,373	1:01	-	-	-	-
18	-	-	10,354	1:05	14,131	1:33	-	-	-	-	-	-	-	-	-	-
19	-	-	5,759	0:29	-	-	-	-	-	-	-	-	-	-	-	-
Total	209,866	25:16	199,408	23:28	316,732	33:30	165,737	26:26	268,513	21:37	248,639	46:52	152,322	17:06	216,932	19:17
Average	12,345	1:29	12,463	1:28	18,631	1:58	11,838	1:53	19,180	1:32	14,626	2:45	13,847	1:33	18,078	1:36

Except for Liam, all participants in the current study were able to read 12,000 characters within 100 minutes on average. For Liam it took 135 minutes on average to read 12,000 characters. These data suggest that if approximately 20 minutes of ER is completed 5 days per week, a weekly goal of 12,000 characters (7,200 standard words) is likely feasible for intermediate-level JFL learners. This is a preliminary result that may be bolstered through further inquiry and replication studies.

Research Question 2

RQ2. What are intermediate-level JFL learners' reading rates prior to and following engagement in ER with a 12,000-character reading goal?

Tables 6 and 7 summarize participants' intermediate- and elementary-level reading rate data. Initial reading rates indicate the average of participants' five pretest reading rates in CPM. Final reading rates are the average of participants' five posttest reading rates. The gain indicates the difference between participants' final and initial reading rates. At the beginning of the study, participants were asked to read 12,000 characters per week. Thus, 12,000 characters will be called a *weekly goal unit* (WGU), which indicates how many weeks' worth of reading participants completed based on the 12,000-character-per-week goal.

Table 6. Intermediate-level Reading Rate Data

Participant	Initial	Final	Gain	Characters Read	WGUs Read	Gain/WGU Read
Alexander	153.35	233.07	79.72	199,408	16.62	4.80
Noah	61.81	105.49	43.68	152,322	12.69	3.44
Aiden	103.56	161.01	57.45	209,866	17.49	3.28
Bruce	67.44	102.16	34.71	165,737	13.81	2.51
Caden	136.04	190.02	53.98	268,513	22.38	2.41
Sophia	120.74	155.51	34.78	216,932	18.08	1.92
Amber	195.48	229.73	34.25	316,732	26.39	1.30
Liam	62.55	81.90	19.36	248,639	20.72	0.93

Note. WGU: Weekly Goal Unit (12,000 characters);

Gain/WGU Read: Gain per 12,000 characters read.

Table 7. Elementary-level Reading Rate Data

Participant	Initial	Final	Gain	Characters Read	WGUs Read	Gain/WGU Read
Alexander	202.01	308.20	106.19	199,408	16.62	6.39
Amber	232.31	338.32	106.01	316,732	26.39	4.02
Noah	137.95	177.31	39.36	152,322	12.69	3.10
Sophia	213.16	266.50	53.34	216,932	18.08	2.95
Bruce	96.39	131.55	35.17	165,737	13.81	2.55
Aiden	178.12	216.85	38.73	209,866	17.49	2.21
Caden	283.24	312.74	29.49	268,513	22.38	1.32
Liam	121.95	112.40	-9.56	248,639	20.72	-0.46

Note. WGU: Weekly Goal Unit (12,000 characters);

Gain/WGU Read: Gain per 12,000 characters read.

At the outset of the study, participants' intermediate-level reading rates ranged from 62–196 CPM. At completion, intermediate-level reading rates ranged from 82–233 CPM. This is an increase in intermediate-level reading rates of 19–80 CPM. Participants also saw a gain of 1–5 CPM per 12,000 characters read.

Participants' elementary-level reading rates increased even more. At the beginning of the study, participants' elementary-level reading rates ranged from 96–283 CPM. At completion, these rates ranged from 112–338 CPM. Excluding Liam, participants' elementary-level reading rates increased 30–106 CPM. They also had a gain of 1–6 CPM per 12,000 characters read.

Overall, participants' substantial reading rate gains lend support to Beglar and Hunt's (2014) suggested reading goal of 200,000 standard words over 28 weeks (7,200 standard words per week or 12,000 Japanese characters per week). Although students read 12,000 characters per week on average, because they did so over 10–19 weeks and did not reach Beglar and Hunt's end goal total of 200,000 standard words (332,000 Japanese characters), additional studies are needed to further demonstrate the efficacy of these reading goals in producing substantial reading rate gains.

Research Question 3

RQ3. What are intermediate-level JFL learners' attitudes towards ER?

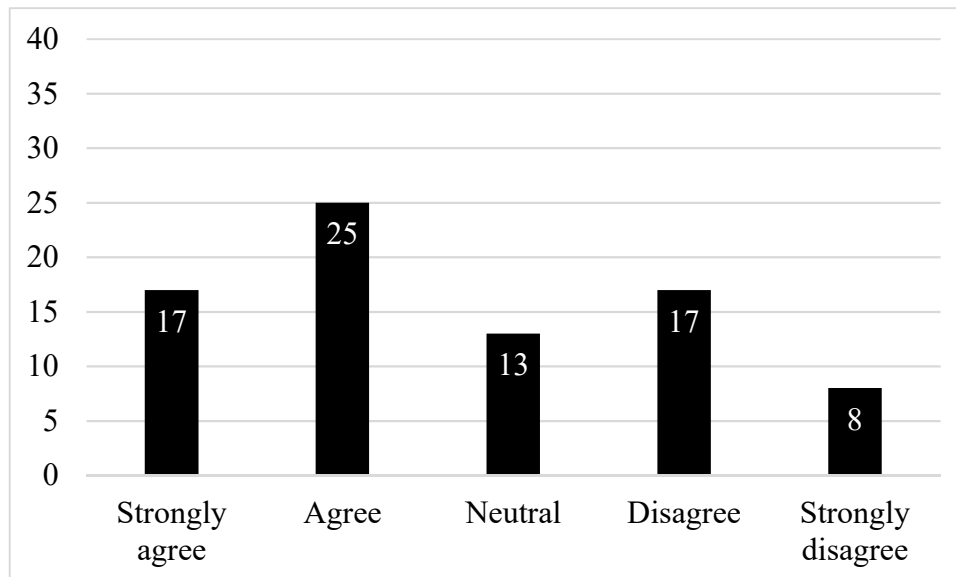
This section addresses how participants answered questions in the pre- and post-study questionnaires. Participants were also asked open-ended follow-up questions regarding their responses to portions of the post-study questionnaire.

Pre-Study Questionnaire

Pre-study questions were asked to ascertain to what degree participants' Japanese reading prior to the study aligned with the principles of ER. All participants completed this survey after discussing the rules and principles of ER with the researcher. Figure 1 summarizes the number of responses for each Likert scale option on each question. The data in Figure 1 show that prior to beginning the study, 53% of participants' responses to the Likert scale questions were "agree" or

“strongly agree.” The data also show that 16% of responses were neutral and 31% were disagree or strongly disagree.

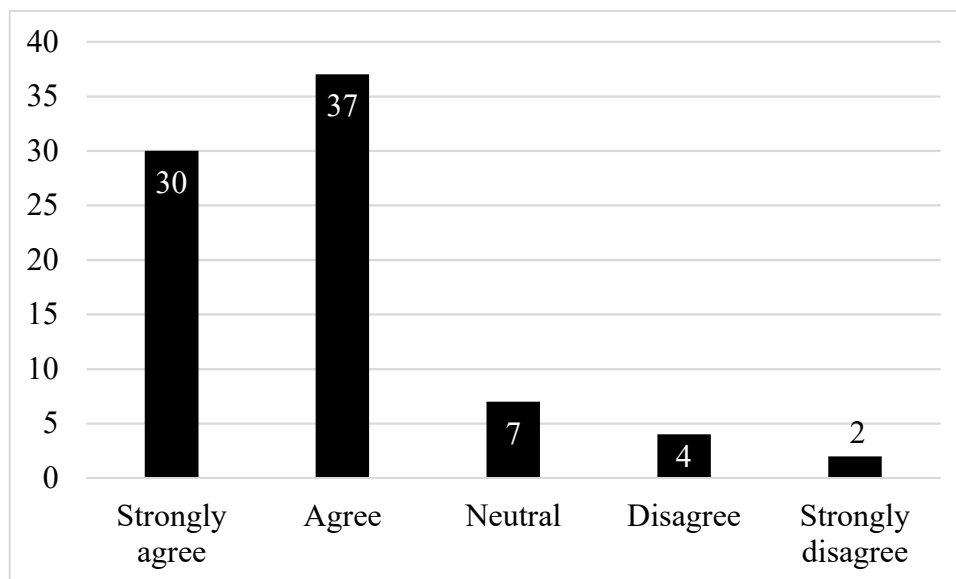
Figure 1. Number of Responses to Pre-Study Questionnaire Questions 1–10



Post-Study Questionnaire

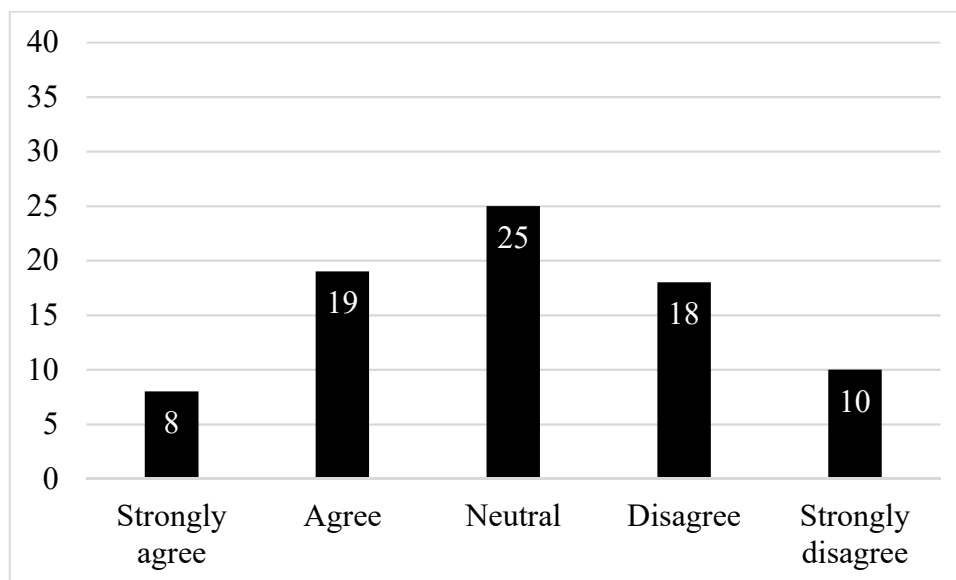
In the post-study questionnaire, participants were asked whether the ER they completed during the study was their first experience with ER. All participants answered in the affirmative. They were also asked to answer the same Likert scale questions that were posed in the pre-study questionnaire. Furthermore, as this was the participants’ first experience with ER, part of the post-study questionnaire asked participants to reflect on their approach to reading in Japanese prior to beginning the study. Following these questions, they were asked a series of new questions regarding the ER they completed as part of the study. Figure 2 summarizes the number of responses for each Likert scale option on the post-study questionnaire. The data in Figure 2 indicate that at the completion of the study, 84% of participants’ responses to the Likert scale questions were “agree” or “strongly agree.”

Figure 2. Number of Responses to Post-Study Questionnaire Questions 1–10



After completion of the study, participants also reflected on how they thought they read prior to beginning their ER experience. Figure 3 summarizes participants' responses to questions 11–20 on the post-study questionnaire. This reflection data shows that 34% of responses were “agree” or “strongly agree,” 31% were neutral, and 35% were “disagree” or “strongly disagree.”

Figure 3. Number of Responses to Post-Study Questionnaire Questions 11–20



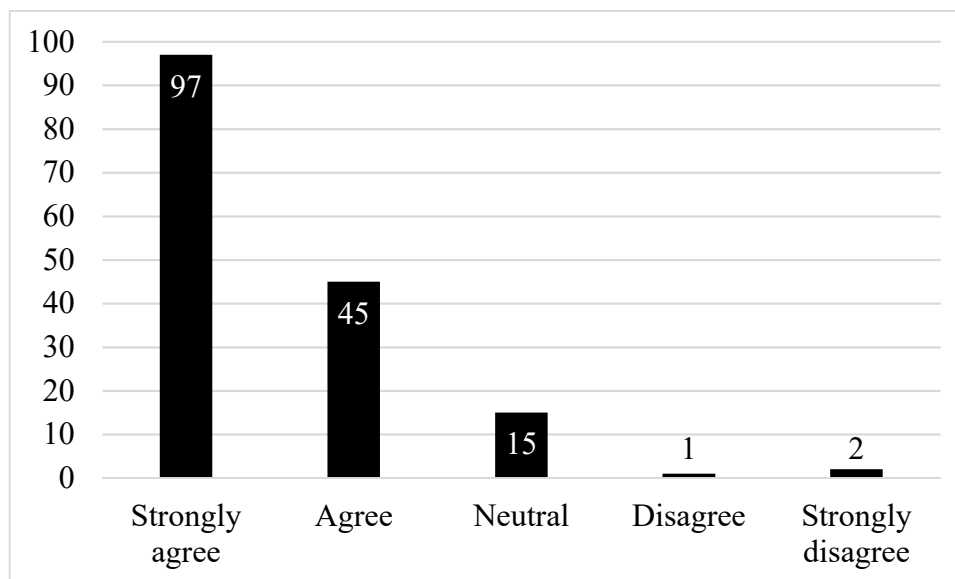
These results indicate that after having engaged in ER for multiple months, participants' responses to the reflection questions on the post-study questionnaire (questions 11–20 shown in Figure 3) differed considerably from their initial answers to the same Likert scale questions posed in the pre-study questionnaire. Specifically, responses on the pre-study questionnaire seemed to

suggest that participants were mostly already following ER principles in their reading at home or in school, with 53% of responses agreeing with the questionnaire's statements. However, when the participants later reflected on their approach to reading prior to joining the study, their responses changed, showing only 34% of responses agreeing with the same statements. This difference seems to suggest that even after having the ER principles explained to them prior to completing the pre-study questionnaire, participants were still not fully aware of how the principles applied to their own reading habits. In fact, the difference in their responses seems to further suggest that the ER experience itself was necessary for them to understand how different ER is from traditional reading (e.g., IR) conducted in typical Japanese courses. Thus, it is thought that the combination of ER and a constant reminder of ER principles was necessary for participants to accurately assess how closely their pre-study reading habits aligned with ER principles.

Participants' responses to questions 11–20 on the post-study questionnaire are likely a more accurate assessment of the degree to which participants' Japanese reading prior to beginning the study aligned with ER principles therefore, these responses are used to discuss changes in participants' reading approach after having completed the study. Specifically, responses to questions 11–20 on the post-study questionnaire show that participants' pre-study reading generally did not closely follow ER principles. No participant agreed with questions 12 and 14, and only one agreed with question 18. These responses to questions 12, 14, and 18 show that prior to joining the study, the participants did not know where to find a variety of Japanese reading material on a wide range of topics, did not read in Japanese as much as possible, and usually read more slowly in Japanese. Most participants reported that their pre-study reading was most often for general understanding, that they found reading Japanese to be a reward in itself, and that their Japanese reading was most often done individually and silently. Responses to the remaining questions were mixed.

In comparison, the participants indicated that after they had completed the study, their approach to reading followed ER principles much more closely. Specifically, while only 34% of responses to the reflection questions on the post-study questionnaire were affirmative, 84% of responses to questions 1–10 on the same questionnaire were affirmative (“agree” or “strongly agree”). These responses suggest that participants were following ER principles much more closely after engaging in the study than prior to participation.

Post-study questions were asked to further explore the participants' experiences with ER. All participants completed this survey at the end of the study. Figure 4 summarizes the number of responses for each Likert scale option for questions 21–40.

Figure 4. Number of Responses to Post-Study Questionnaire Questions 21–40

Responses to Questions 21–40 on the post-study questionnaire show participants’ positive perceptions of ER. Specifically, participants agreed that there are many benefits that come from ER, as shown by the overwhelming 89% of positive responses (“strongly agree” or “agree”) to questions 21–40. Participants felt particularly strongly about question 27, with all strongly agreeing that more learners should be given the chance to experience ER. Responses to questions 22 (seven “strongly agree,” one “agree”) and 25 (seven “strongly agree,” one “neutral”) further indicated participants’ resolve to continue ER after completion of the study as well as the high degree to which participants enjoyed the calm setting of the ER sessions. Furthermore, all participants reported liking ER and felt ER was helpful in studying and learning Japanese. Results also suggest that ER helped all participants better understand what they were reading, made them feel like they could read better, and helped them find joy and motivation in reading. One participant disagreed with question 26, and one strongly disagreed to questions 34 and 35. Table 8 further suggests participants had positive attitudes towards ER and that they felt that ER was enjoyable, helped motivate them, and helped increase their reading abilities.

Table 8. Summary of Questionnaire Results

	Agree	Neutral	Disagree
Increased Enjoyment From ER (Questions 21–23, 39)	97%	3%	0%
Increased Motivation From ER (Questions 25–27, 40)	94%	3%	3%
Increased Reading Ability From ER (Questions 29–33)	88%	12%	0%
Positive Attitude Towards ER (Questions 24, 28, 34–38)	82%	14%	4%

Some themes emerged during the analysis of participants' responses to the open-ended questions posed in the post-study questionnaire. These themes included (a) ER's effect on lowering one's affective filter; (b) the benefits of having a set time to engage in ER; (c) the contrast between ER and previous approaches to reading (e.g., IR); and (d) the need for level-appropriate reading materials (i.e., material that is relatively easy to read based on one's individual ability). For example, Alexander said the following in response to being asked "What made extensive reading an enjoyable experience for you?":

It was relaxing to just read. I'm not sure it had anything to do with it being in Japanese per se, but having a time set apart to just focus on reading in a quiet place was relaxing. I also was never given the opportunity to read like this in Japanese [before], so it showed me what I can do, more than anything.

This quote from Alexander suggests that ER helped lower his affective filter, helping him be relaxed while also providing a contrast to what he had previously experienced in his studies of Japanese. He commented that having a set time to engage in ER made the experience enjoyable. Other participants had similar comments. Sophia noted that she enjoyed not being asked questions about the material. Amber and Bruce felt that being able to read easy books that were at their level helped them enjoy ER. Bruce commented on the contrast between ER and other approaches to reading, stating, "It showed me another way to study that I wasn't familiar with before this study." Others also reported that the availability of materials and being able to choose what to read made the experience enjoyable. These comments suggest that ER may lead to a lower affective filter and thus a more enjoyable experience than with IR approaches.

When asked, "What made extensive reading a helpful learning experience for you?" five of the eight participants noted that seeing unknown words in context was helpful. Bruce repeated his previous comments, suggesting that it was helpful to be able to read books that were at his level. He said, "I feel like I could catch on to simple things I didn't know or had never been taught because a majority of the text was familiar." In response to this same question, Alexander stated that the confidence he gained from engaging in ER helped him learn. Finally, Caden commented that the type of environment ER provides, and the contrast between ER and other approaches to reading made ER a helpful learning experience for him. Specifically, Caden reported the following:

[ER] gave me a lot of input and practice, but it was practice that was enjoyable and didn't feel forced. In my Japanese classes [outside of this study], I was exposed to more [difficult] texts . . . but I felt that my comprehension and confidence were increasing as I [participated in this research] study.

These comments indicate that one of the biggest factors that participants felt helped them learn was the context provided by reading level-appropriate texts.

There was a larger variety of responses to the question, "Why do you believe more learners should be given the chance to experience extensive reading?" Some participants stated generally that they felt they benefited from ER and thought others could benefit also, while a few other participants stated that they felt reading large quantities of passages was a good experience that others could also have. Alexander stated that ER can help others read beyond "academic" material,

and Sophia commented on how ER builds one's confidence by showing readers that they can read more than they think they can. Amber echoed this comment in the following statement:

I feel like [ER] built my confidence that I could read things meant for native readers, even though it meant working my way up from very low levels of difficulty. Having had difficulty prior to this study with a light novel meant for preteens, I wouldn't have thought I could have read as much of "*Madogiwa no Totto-chan*" as I did, until I got to a level close to it and [the researcher] told me that I should be able to read it given the [number] of unknown words allowed per page [and still be able to understand 98% of the text].

In the following comment, Bruce explained his thoughts on how ER contrasts with traditional approaches (e.g., IR) and how ER was enjoyable, helpful, and may benefit others:

Yes, I think that [ER] would show that language learning can happen in a variety of ways without the intense pressure of a classroom setting. It also showed me that language learning can be fun. I don't look back on my university language classes with enjoyment. If I had this type of learning class, I may have enjoyed my experience more.

In general, these comments further reflect participants' unanimous selection of "strongly agree" to the statement "I believe that more learners should be given the chance to experience extensive reading."

In response to the question, "What about extensive reading helped you concentrate/focus better?" two participants mentioned that having a set time for ER helped them focus. Four others commented that being able to read in a quiet environment was helpful. Amber also commented that not being required to read out loud, and thus avoiding possible judgment by peers or an instructor, helped her focus. Bruce and Noah reported that being able to read at their own pace and choose what they read was helpful. These statements from participants demonstrate the desire of language learners to have set times for individual, silent reading that is not constantly being assessed for accuracy.

Finally, participants responded to the open-ended question, "How did extensive reading make you feel motivated to read more?" Several participants responded that ER's effect on lowering one's affective filter as well as the level-appropriate material helped the participants feel motivated. Amber mentioned that she now felt less guilt from reading "lower-level" material and that she felt more confident reading at her level. Bruce and Caden echoed this sentiment, stating that ER gave them confidence. Bruce elaborated on this response, stating, "[ER] showed me that I could like reading if I read at my level." These responses further suggest that learners need level-appropriate reading materials to boost their confidence and thus their motivation to read.

These results are similar to those found by Lin et al. (2012). In assessing ESL/EFL students' perceptions of a sustained silent reading program with aspects similar to ER, Lin et al. found that a large majority of participants agreed with the statements posed in the post-study questionnaire. Specifically, 76% or more of responses to the questions in their study were positive (i.e., "strongly agree" or "agree"). Similarly, in the current study, Table 8 shows that a large majority (82% or more) of responses to the same statements were positive. These results bolster the findings of Lin et al. and further show the positive attitudes participants have toward programs that allow them to choose what they want to read and to read individually and silently.

Many participants in this study noted an increase in confidence that came from engaging in ER. Nishino (2007) also found confidence to be a theme in participants' discussions, stating that confidence seemed to influence fluctuations in her two participants' L2 reading motivation.

De Burgh-Hirabe and Feryok (2013) also found factors influencing JFL learners similar to those found in the current study. Specifically, de Burgh-Hirabe and Feryok stated that ER books and autonomy (e.g., being free to choose books) are two main factors that affect learner attitudes towards ER. Similarly, level-appropriate books as well as the ability to choose what to read were factors that learners in the current study stated had made ER a motivating experience.

CONCLUSION

Limitations and Future Research

Participants in the present study were required to meet with the researcher for two to three 1-hour ER sessions per week and were not allowed to conduct ER on their own outside of these sessions. The time-intensive nature of the current study limited my ability to procure more participants. Despite all being intermediate-level learners, participants' reading rate ranges and gains varied greatly. This is likely due to the small sample size but also may further emphasize the effect individual differences have on reading rate. The current study was also limited in the type of learners that participated. Specifically, participants were all native English speakers with somewhat similar backgrounds. Furthermore, the majority of participants were immersion learners. As participants self-enrolled in the current study, I was also unable to conduct random sampling as part of this study. The reliance on self-enrollment may have also led to a self-selection bias or an implementation threat, such as attracting participants who may have had a higher level of motivation than the overall population of JFL learners. This is a factor for which it is difficult to control.

Although results of the present study support those of previous research, further replication studies, including studies with larger numbers of participants from different backgrounds, will further offset the above-mentioned limitations and strengthen the implications of this study. However, given the results of this study, it is hoped that instructors, researchers, and administrators will further consider the implementation of ER and take advantage of the benefits ER can provide to language learners. In the future, I plan to further research other possible positive effects of ER, such as increases in vocabulary size, incidental learning of vocabulary or kanji characters, and language proficiency gains.

Pedagogical Implications and Suggestions

When implementing ER curriculum, directors, designers, and instructors must decide on an appropriate amount of reading for their learners. Preliminary results indicate that 12,000 characters (7,200 standard words) per week is likely an appropriate goal for ER courses or other courses that focus mainly on reading. The number of characters can be adjusted when ER is used as a smaller supplementary activity to other coursework. However, it is suggested that learners be required to read a certain number of characters rather than a certain number of minutes or pages, because learners who focus on an amount of time to read may revert to reading more slowly. Pages

also vary greatly in the number of characters they contain, not only within the same book but also across different texts and passages.

This study showed that learners with no experience with ER will likely be less aware of their own approach to reading and how it compares to the ER approach. Thus, it would be advantageous for ER instructors not only to provide a detailed explanation of ER but also to constantly display ER principles for learners to review regularly. Furthermore, instructors should continually follow up with learners regarding their approach to reading throughout any ER program.

REFERENCES

- Awano, M., Kawamoto, K., & Matsuda, M. (2012). *Nihongo kyōshi no tame no tadoku jugyō nyūmon [Introduction to extensive reading classes for Japanese language teachers]*. Ask Publishing.
- Beglar, D., & Hunt, A. (2014). Pleasure reading and reading rate gains. *Reading in a Foreign Language*, 26(1), 29–48.
- Beglar, D., Hunt, A., & Kite, Y. (2012). The effect of pleasure reading on Japanese university EFL learners' reading rates. *Language Learning*, 62(3), 665–703. <https://doi.org/10.1111/j.1467-9922.2011.00651.x>
- Carver, R. P. (1972). Evidence for the invalidity of the Miller-Coleman readability scale. *Journal of Reading Behavior*, 4(3), 42–47. <https://doi.org/10.1080/10862967109546999>
- Day, R. R. (2018). Extensive Reading. In J. I. Lontas & M. DelliCarpini (Eds.), *The TESOL encyclopedia of English language teaching* (pp. 1–7). Wiley-Blackwell. <https://doi.org/10.1002/9781118784235.eelt0472>
- Day, R. R., & Bamford, J. (2002). Top ten principles for teaching extensive reading. *Reading in a Foreign Language*, 14(2), 136–141.
- de Burgh-Hirabe, R., & Feryok, A. (2013). A model of motivation for extensive reading in Japanese as a foreign language. *Reading in a Foreign Language*, 25(1), 72–93.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate research in education* (10th ed.). McGraw-Hill Education.
- Hitosugi, C. I., & Day, R. R. (2004). Extensive reading in Japanese. *Reading in a Foreign Language*, 16(1), 20–39.
- J-CAT Project Team & International Student Center at University of Tsukuba. (2020, February 28). *J-CAT no sukōa ni tsuite [About J-CAT scores]*. J-CAT Japanese Computerized Adaptive Test. <https://web.archive.org/web/20200228041248/http://www.j-cat.org/html/ja/pages/interpret.html>
- Lee, J., & Hasebe, Y. (2016). *JReadability*. JReadability. https://jreadability.net/ja/q_and_a
- Leung, C. Y. (2002). Extensive reading and language learning: A diary study of a beginning learner of Japanese. *Reading in a Foreign Language*, 14(1), 66–81.
- Lin, D. T. A., Choo, L. B., & Pandian, A. (2012). Learners' perceptions of sustained silent reading practices in tertiary classrooms. *Procedia—Social and Behavioral Sciences*, 55, 266–274. <https://doi.org/10.1016/j.sbspro.2012.09.503>
- Matsushita, T. (2011). *Nihongo o yomu tame no goi dētābēsu (VDRJ) Ver. 1. 1 [Vocabulary Database for Reading Japanese (VDRJ) Ver.1.1]*. University of Tokyo. http://www17408ui.sakura.ne.jp/tatsum/vdrj/VDRJ_Ver1_1_Research_Top60894.xlsx

- Matsushita, T. (2012a). *Vocabulary size test for reading Japanese (Version 1)*.
- Matsushita, T. (2012b). “Nihongo o yomu tame no goi-ryō tesuto” no kaihatsu [Development of a vocabulary size test for reading Japanese]. *Proceedings of the International Conference on Japanese Language Education (ICJLE) Nagoya 2012*, 1, 310.
<http://www.nkg.or.jp/icjle2012/common/pdf/A362-A567.zip>
- McLean, S., & Rouault, G. (2017). The effectiveness and efficiency of extensive reading at developing reading rates. *System*, 70, 92–106.
<https://doi.org/10.1016/j.system.2017.09.003>
- Mori, S. (2004). Significant motivational predictors of the amount of reading by EFL learners in Japan. *RELC Journal*, 35(1), 63–81. <https://doi.org/10.1177/003368820403500106>
- Mori, Y., & Mori, J. (2011). Review of recent research (2000–2010) on learning and instruction with specific reference to L2 Japanese. *Language Teaching*, 44(4), 447–484.
<https://doi.org/10.1017/S0261444811000292>
- Nakanishi, T. (2015). A meta-analysis of extensive reading research. *TESOL Quarterly*, 49(1), 6–37. <https://doi.org/10.1002/tesq.157>
- Nishino, T. (2007). Beginning to read extensively: A case study with Mako and Fumi. *Reading in a Foreign Language*, 19(2), 76–105.
- Peterson, J. (2019a). *Japanese extensive reading resources database (JERRD) (Version 1)* [Computer software]. <https://www.researchgate.net/project/Extensive-Reading-Tadoku-Databases>
- Peterson, J. (2019b). *The effects of extensive reading on reading rate among intermediate-level learners of Japanese as a foreign language* [Doctoral dissertation, Purdue University].
<https://doi.org/10.25394/PGS.9922868.v1>
- Peterson, J., & Peterson, R. (2017). *Reading fluency solutions* (Version 1.0.0) [JavaScript; Web Application]. <https://reading-fluency-solutions.firebaseio.com/>
- Peterson, J., & Peterson, R. (2018, February 15). *Reading fluency solutions: Programming for reading* [Paper presentation]. Utah Foreign Language Association’s 103rd Annual Conference, Ogden, UT, United States. <https://doi.org/10.13140/RG.2.2.35824.76803>
- Peterson, J., & Yuasa, J. (2019). *General database of Japanese pleasure reading resources*.
<https://www.researchgate.net/project/Extensive-Reading-Tadoku-Databases>
- Tabata-Sandom, M. (2017). L2 Japanese learners’ responses to translation, speed reading, and ‘pleasure reading’ as a form of extensive reading. *Reading in a Foreign Language*, 29(1), 113–132.
- Tabata-Sandom, M., & Macalister, J. (2009). That “eureka feeling”: A case study of extensive reading in Japanese. *New Zealand Studies in Applied Linguistics*, 15(2), 41–60.
- Taguchi, E., Takayasu-Maass, M., & Gorsuch, G. J. (2004). Developing reading fluency in EFL: How assisted repeated reading and extensive reading affect fluency development. *Reading in a Foreign Language*, 16(2), 27.

Jeff Peterson (Ph.D., Purdue University) is a Visiting Assistant Professor of Japanese at Brigham Young University. His research interests include Japanese pedagogy, extensive reading, computer-assisted language learning, pitch accent training, and corpus research.

Email: jeffpeterson@byu.edu