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Developing reading fluency in EFL: How assisted repeated reading and extensive reading affect fluency development

Etsuo Taguchi
Daito Bunka University

Miyoko Takayasu-Maass
Seigakuin University

Greta J. Gorsuch
Texas Tech University

Abstract

Extensive research on reading in a first language has shown the critical role fluency plays in successful reading. Fluency alone, however, does not guarantee successful reading. Cognitive and metacognitive reading strategies and schemata that readers utilize also play important roles in constructing meaning from text. Most research, however, indicates that good reading ability is virtually impossible in the absence of fast and accurate word recognition skills and reading fluency. Therefore, efficient ways of improving fluency must be developed. In answer to this need, extensive reading programs have been implemented as an effective approach in EFL settings. Another method, repeated reading, seems equally promising. The main objective of the current study is to focus on whether and how assisted repeated reading with an auditory reading model enhances EFL readers' fluency. Some comparisons of Japanese university students' performances in repeated reading and extensive reading programs are also made in an attempt to see gains in reading fluency and comprehension, and to explore some characteristics which are unique to assisted repeated reading. Quantitative and qualitative analyses of participants' reading behaviors suggest that assisted repeated reading is equally as effective as extensive reading in increasing EFL readers' silent reading rate, and favorably affects learners' perceptions of reading activities. Furthermore, the results indicate the specific role the repetition and listening components of assisted repeated reading play to facilitate reading comprehension. Assisted repeated reading can potentially develop weak ESL/EFL readers' fluency and help them become independent readers by providing a distinct form of scaffolding.
Keywords: repeated reading, assisted repeated reading, extensive reading, reading fluency, reading comprehension

Introduction

In the past decade, there has been sustained interest in promoting reading as a significant and viable means of language development for second and foreign language (L2 and FL) learners (Day and Bamford, 1998; Krashen, 1995). This is especially the case in English as a foreign language (EFL) settings in which sources of L2 input are limited (Gebhard, 1996; Redfield, 1999). Extensive reading (ER) and repeated reading (RR) are two types of reading instruction programs that have been used in English as a second or foreign language (ESL or EFL) settings as effective means of developing reading fluency and comprehension. ER is an approach in which readers self-select materials from a collection of graded readers (books which have reduced vocabulary range and simplified grammatical structures) with the goal of reaching specified target times of silent sustained reading (Donnes, 1999; Hill, 1997). ER is thought to increase L2 learners' fluency, i.e., their ability to automatically recognize an increasing number of words and phrases, an essential step to comprehension of L2 texts (Grabe, 1991; Paran, 1996; Perfetti, Van Dyke, and Hart, 2001).

RR, in contrast, is rather a new instructional approach in L2 or FL reading contexts. In the RR approach, L2 learners read specified passages from graded readers repeatedly in order to increase learners' sight recognition of words and phrases, resulting in increased fluency and comprehension (Blum, Koskinen, Tennant, Parker, Straub, and Curry, 1995; Dlugosz, 2000; Taguchi, 1997; Taguchi and Gorsuch, 2002). The RR approach has been extensively studied in English as a first language (L1) contexts and overall has been shown to be effective in developing reading fluency and comprehension of monolingual readers of English (see the National Reading Panel, 2000 and Kuhn and Stahl, 2003 for extensive reviews of studies on RR in English L1 settings).

Based on accumulated empirical evidence, L2 or FL reading researchers have suggested it as a promising method to develop L2 or FL readers' fluency and consequently improve their comprehension (Anderson, 1994; Grabe 1991). There have been some studies that investigated the effect of RR in L2/FL settings. In Taguchi and Gorsuch (2002), for example, EFL learners completed 28 RR sessions using contiguous segments from two graded readers. During each session, the learners read the passage seven times, three of those times while listening to the passage read aloud on an audiotape. It is the ultimate hope of RR practitioners that L2 learners' gains in reading fluency and comprehension will transfer to new reading passages.

Based on previous research, the present study investigates whether and how RR facilitates fluency development and comprehension. Using an experimental design, the study also compared two reading development methods currently used in FL settings. In the current study, one group of L2 learners engaged in an assisted RR program, in which an audiotaped reading model was supplied, while another group of learners engaged in an ER program. There are four research questions:

1. Is RR effective in developing fluency in beginning-level FL readers?
2. Is RR as effective as ER to develop reading fluency of beginning level FL readers?
3. Is RR as effective as ER to improve comprehension of beginning-level FL readers?
4. How do beginning-level FL readers perceive the effectiveness of each method?

Literature Review

In this literature review, the following research areas will be discussed in order to foreground and motivate our research questions: the role of word recognition in fluent reading, RR in L1 settings, and RR and ER in L2/FL settings.

A critical role of word recognition skills in fluent reading

Extensive research has been done on eye-movements of monolingual readers of English showing the critical role of automatic word recognition in fluent, skillful reading. For example, readers fixate their eyes on about 80% of the content words but 40% of the function words. When skillful readers do skip, they rarely skip more than one word (e.g., Adams, 1990; Just and Carpenter, 1980, 1987). Readers exhibit extreme sensitivity to letter-level features of text. Rayner and Bertera (1979) masked one letter in foveal vision and found that readers' reading speed was reduced by 50%.

Skillful readers seem to execute word recognition tasks automatically and effortlessly, thus allowing them to direct their cognitive resources to comprehending text. This notion is now widely accepted in both English as L1 learning contexts (e.g., Adams, 1994; Just and Carpenter, 1987; Rayner and Pollatsek, 1989; LaBerge and Samuels, 1974; Samuels, 1994; Perfetti, 1985; Stanovich, 1991, 1992), and English as L2/FL learning contexts (e.g., Anderson, 1999; Day and Bamford, 1998; Eskey, 1988; Grabe, 1991). It is likely, however, that efficient word recognition is not the sole foundation of good comprehension. Background knowledge and higher-order comprehension skills, such as generating predictions and making inferences also influence readers' comprehension performances (e.g., Anderson and Pearson, 1984; Carrell and Eisterhold, 1983). Still, for either L1 or L2/FL readers, building automaticity in word recognition is essential because "it is highly unlikely that excellent reading comprehension will be observed in the face of deficient word recognition skills" (Stanovich, 1992: 4). Good readers should be able to decode words in text through "a kind of automatic identification that requires no conscious cognitive efforts" (Eskey, 1988: 94). These comments are particularly relevant to L2/FL reading teachers: reading in a foreign or second language is usually a slow, laborious process (Anderson, 1999; Jensen, 1986; Segalowitz, Poulsen, and Komoda, 1991).

This state of affairs may point to motivational problems for learners in L2/FL contexts in regards to utilizing reading as a significant source of linguistic input. Nuttall (1996: 127) posits a "vicious circle" to describe readers who cannot develop good reading skills. Slow readers do not read much, and if they do not read much, they do not understand. If they do not understand, then they cannot enjoy reading. Day and Bamford (1998) note that it is only through actual reading experience that L2 or FL readers can acquire the complex linguistic, world, and topical knowledge needed to improve their reading skills (Day and Bamford, 1998: 19). Therefore, for theoretical and pedagogical reasons, L2 and FL researchers and educators are focusing their efforts on finding effective methods to help L2 and FL learners to increase their reading rates (Day and Bamford, 1998; Grabe, 1991, 2004; Silberstein, 1994).

Repeated reading (RR) in L1 settings

RR is one method developed to increase learners' reading rates. RR was devised by Samuels (1979) and consists of re-reading a short passage silently or orally until a reader is able to read it with ease. Learners in an RR program may engage in unassisted RR where no oral reading model of a passage is supplied. Learners may also engage in an assisted RR program in which a live or audiotaped model of reading is given (e.g., Chomsky, 1976; National Institute of Child Health and Human Development, 2000). There has been extensive research on the effects of RR in English as L1 settings. Re-reading passages has been found to increase students' oral reading rates and accuracy (Carver and Hoffman, 1981; Chomsky, 1976; Dahl, 1974; Dowhower, 1987; Herman, 1985; Rashotte and Torgesen, 1985; Samuels, 1979; Young, Bowers, and MacKinnon, 1996). This in turn leads to better comprehension of passages (Dowhower, 1987; Herman, 1985; O'Shea, Sindelar, and O'Shea, 1985; Young et al., 1996). In addition, practice effects of re-reading a passage are carried over to new, unpracticed passages in terms of reading rate and accuracy (Carver and Hoffman, 1981; Dowhower, 1987; Faulkner and Levy, 1994; Herman, 1985; Rashotte and Torgesen, 1985; Samuels, 1979) and comprehension (Dowhower, 1987; Morgan and Lyon, 1979; Young et al., 1996). RR has a positive effect on readers' vocabulary development (Koskinen and Blum, 1984), and seems to enable readers to read in larger and more syntactically and phonologically appropriate phrases (Dowhower, 1987). It has been discovered, however, that unless the degree of overlapping vocabulary between old and new passages is high, transfer of gains to the new passage is minimal in terms of reading rate (Rashotte and Torgesen, 1985).

Repeated reading in L2/FL settings

While RR has received considerable attention in English as L1 settings, somewhat less attention has been paid to research on RR in L2 or FL settings. Blum, Koskinen, Tennant, Parker, Straub, and Curry (1995) investigated whether home-based RR with an auditory model (audio cassettes) is an effective supplement to an L2 literacy program. They concluded that RR improved the readers' ability to read fluently and accurately books of increasing difficulty. Significantly, readers also reported through a survey that RR enhanced their motivation to read.

In a later study, Taguchi (1997) examined the effects of RR on English oral and silent reading rates of 15 Japanese university students. The ten week study stipulated 28 in-class RR sessions. In each session readers read a passage silently seven times; three of those times, readers read while listening to an audiotaped model of the passage. Taguchi found that silent reading rates increased significantly even toward the seventh reading; there was no apparent leveling off of reading rate increases. However, when readers were asked to silently read or read aloud new passages, they did not seem to transfer their increased reading rates to the new passages. There was one exception: the lowest level readers showed a significant improvement in their oral reading rate of new passages. Motivated by Taguchi's results, Taguchi and Gorsuch (2002) focused on RR transfer effects for silent reading rate and comprehension to new passages. Their results were not conclusive. They found that the ten week RR program facilitated participants' (nine EFL readers) reading rates from a pre-test reading passage done at the beginning of the program to a post-test reading passage done at the end of the program (a different passage). However, the reading rate gains from the first RR session passage to the 28th (the last) RR

session passage approached but did not exceed the *p* value set for significance. In addition, control (non-RR) and experimental (RR) group readers showed similar and modest transfer gains for reading comprehension from the pre-test to the post-test passage. Taguchi and Gorsuch speculated that the lack of clear transfer effects for reading rate and comprehension of RR group readers was caused by the shortness of the treatment period.

Extensive reading (ER) in L2/FL settings

As discussed above, L2 learners in ER programs self-select materials within their "linguistic capabilities" from a collection of graded readers (Day and Bamford, 1998: 126). ER has several aims, which include encouraging L2 readers to read for pleasure and information both inside and outside the classroom, to read for meaning, and to engage in sustained silent reading (Day and Bamford, 1998; Davis, 1995; Krashen, 1995; Susser and Robb, 1990). Research investigating the benefits of ER in L2/FL contexts has shown that ER improves L2 or FL readers' comprehension (Elley, 1991; Elley and Mangubhai, 1983; Mason and Krashen, 1997; Robb and Susser, 1989), promotes their vocabulary knowledge development (Day, Omura and Hiramatsu, 1991; Pitts, White and Krashen, 1989), and enhances their writing skills (Elley and Mangubhai, 1983; Hafiz and Tudor, 1990; Janopoulos, 1986) and oral proficiency (Cho and Krashen, 1994). ER has also been reported to be effective in facilitating growth of readers' positive attitudes toward reading and increasing their motivation to read (Cho and Krashen, 1994; Mason and Krashen, 1997). With specific reference to reading fluency development, ER has shown to be effective in increasing reading speed and comprehension (Bell, 2001; Elley and Mangubhai, 1983; Robb and Susser, 1989).

Considering previous studies on ER and RR programs, both approaches likely increase L2 readers' automatic word recognition. However, RR differs from ER in that simplified texts, chosen by the teacher, are read repeatedly by L2 readers both in and out of class (see Dlugosz, 2000, for her description of home based RR for L2 children learners). By re-reading texts, the effects of repetition on readers' automatic word recognition ability may be intensified. Assisted RR also allows for the systematic use of simultaneous audio recordings, which engage readers in "two channels of perception" and may increase L2 learners' "retention of words and grammatical constructions in long term memory" (Dlugosz, 2000: 288-289).

Method

Participants

The participants were drawn from a class of 29 Japanese students who were learning English as a foreign language at a university near Tokyo. Twenty students volunteered to participate in this study; five of them were males and fifteen were females. All were first-year Japanese linguistics students, and as part of their academic program, had five 90-minute English classes a week designed to improve reading, writing, speaking and listening, and grammar. Most of the participants were 18 years old with two exceptions; one was 19 and the other was 60. Three of the participants had traveled abroad for pleasure for up to two months.

The participants were matched based on the reading section scores and the total scores of a TOEFL test which was administered prior to this study. Half of the participants (n = 10) were assigned to the RR group, and the other half to the ER group (n = 10). Table 1 below shows descriptive statistics for participants' scores on the reading section of the TOEFL, total TOEFL scores, and word per minute (WPM) scores for five silent readings of the pretest passage (see Materials section below). The RR and ER groups were comparable, according to these measures. For example, their mean scores on the TOEFL reading subtest were 36.80 and 36.90, respectively. To ensure that RR and ER group participants were not statistically different at the outset of the treatments, seven Mann Whitney U tests were conducted (TOEFL reading subtest, TOEFL total, and WPM averages for five readings of the pre-test passage). There were no significant differences between the RR and ER groups on any of the seven measures at a p value of .00714 (.05 divided by 7 for seven comparisons).

Table 1: Descriptive statistics for RR and ER group comparisons

Repeated Reading (RR) Group

Measure	*M*	*SD*	Min	Max	Skewness	Kurtosis
TOEFL reading	36.80	4.39	31.00	44.00	0.17	-0.91
TOEFL Total	381.70	31.18	313.00	417.00	-1.23	1.55
WPM 1	84.84	19.38	56.52	107.79	-0.06	-1.85
WPM 2	78.11	20.67	45.78	109.06	-0.22	-0.66
WPM 3	97.38	13.53	74.76	116.60	-0.21	-0.83
WPM 4	104.65	19.14	63.28	126.12	-1.06	1.19
WPM 5	117.22	17.93	95.08	142.62	0.04	-1.54

Extensive Reading (ER) Group

Measure	*M*	*SD*	Min	Max	Skewness	Kurtosis
TOEFL reading	36.90	3.70	31.00	42.00	-0.02	-1.22
TOEFL Total	383.70	29.93	323.00	433.00	-0.54	1.17
WPM 1	80.88	19.14	48.79	114.44	0.03	-0.09
WPM 2	80.21	22.73	57.58	128.75	1.23	0.95
WPM 3	105.01	32.21	62.64	165.54	0.38	-0.22
WPM 4	103.89	40.41	66.21	206.00	2.08	4.86
WPM 5	119.45	46.25	62.64	213.10	0.77	0.24

Materials

The Repeated Reading (RR) texts. The textbooks for the RR program were two graded readers from the Heinemann New Wave Readers series, Level 5: *The Missing Madonna* (McLean, 1991) and *Away Match* (Axbey, 1991). The average readability estimate for the Flesch-Kincaid, Fog, and Fry formulas was 4.80 (*SD* = 0.43) for *The Missing Madonna*, and 4.83 (*SD* = 0.39) for *Away Match* (see Table 2 below). Both books were therefore estimated at about the 4th grade level in the U.S. These books were deemed the appropriate level for the RR groups' reading development based on the investigators' empirical observations. These books were also suitable because they were accompanied by audiotapes in which the stories were dramatized with

different characters, music, and sound effects. These tapes were used to provide reading models for the RR group. Each of the two stories in the textbooks was segmented into portions of between 334 and 608 words for the total of 42 RR sessions. Out of 42 RR sessions, 24 were from *The Missing Madonna* and the remaining 18 were from *Away Match.* The RR group finished the first textbook *The Missing Madonna*, which comprises 31 pages, and they read 26 pages of the second book *Away Match.* So, the total number of pages they read was 57 pages. The cumulative number of words included was 16,963. Participants read those 57 pages five times in the treatment.

The Extensive Reading (ER) texts. The ER library was comprised of 83 graded readers: 27 level-five books from Heinemann New Wave Readers (the same level as the two texts used for the RR treatments), 22 elementary-level books and 34 intermediate-level books from Heinemann Guided Readers. According to records kept by the students (see Procedure section below), the total amount of time the ER group spent for sustained silent reading was between 733 minutes and 901 minutes. The number of books they finished reading during the research period was three to six, and the number of pages they read ranged from 147 to 337 with an average of 205 pages.

Pretest and posttest. Two test forms, Form A and Form B, of the U.S. fourth-grade passage in the *Burns/Roe Informal Reading Inventory* (Burns and Roe, 1999) were used as the pretest and posttest measure to investigate differences between the RR and ER groups at the end of the treatment period. These two test forms were considered to be suitable to measure reading fluency of U.S. 4th graders: the readability scores of Flesch-Kincaid, Fog, and Fry formulas for the pretest and posttest passages suggested they were at a 4th to 6th grade level (see Table 2 below).

Table 2: Readability estimates for RR treatment passages, and Pretest and Posttest passages

Passage	Flesch-Kincaid	Fog	Fry	*M*	*SD*
The Missing Madonna	4.20	5.20	5.00	4.80	0.43
Away Match	4.30	5.20	5.00	4.83	0.39
Pretest	4.00	6.80	4.90	5.23	1.17
Posttest	4.00	6.50	4.80	5.10	1.04

The pretest was 309 words and the posttest was 208 words. The testing passages were somewhat shorter than the RR treatment passage portions to minimize the time demands and possible frustration on the part of the test-takers. The original ten comprehension questions in the inventory were altered to include eight questions which were exclusively designed to test readers' comprehension. Questions that test readers' vocabulary knowledge were excluded because of a possible difference in vocabulary repertoire between monolingual readers of English and EFL readers. In other words, the vocabulary words to be tested across the tests were deemed at the same difficulty level for English L1 readers, but they may not be so for EFL readers. Taguchi and Gorsuch (2002) noticed this problem while analyzing their students' answers to two vocabulary questions, and they consequently eliminated these data from their analyses. In the present study two vocabulary questions from the pretest and one from the posttest were

excluded, and in order to equalize the number and types of questions across the tests, one question about the sequence of events in the posttest was also excluded.

Participants had to answer the comprehension questions without referring to the passages. The questions on both the pretest and posttest were open-ended and designed to elicit readers' comprehension of the main ideas, specific details, and inferences that could be drawn from the text, e.g., *What is this story about? How heavy was the blue and white ship? Was the bookmobile crowded?* and *Was the librarian friendly? What did the story say that made you think that?* The participants' answers were scored by the two Japanese investigators, with an interrater reliability of .93. Each answer was given a score of 2 points for a correct answer, 1 point for a partially correct answer, and a zero for a wrong answer or no answer. One point was subtracted from the assigned score for answers with redundant information. The maximum score for each test was 16. Participants were allowed to answer in either Japanese or English.

Vocabulary overlap among the tests and RR treatment texts. The degree of word overlap was measured for the pretest, posttest, and RR treatment passages. The total number of words was 309 for the pretest, 208 for the posttest, and 16,963 for the accumulated RR treatment passages. Vocabulary overlap was determined by counting each word only once despite its multiple appearances in the passages. Further, based on two studies on L1 RR that measured the degree of word commonality (Rashotte and Torgesen, 1985; Young et al., 1996), we counted a different form of a word as a different word. For instance, *be, is, are, was,* and *were* all counted as different words. Given this method of estimating vocabulary overlap, the number of different words in each passage was 144 for the pretest, 136 for the posttest, and 1,984 for the RR text. The amount of word overlap between the pretest and posttest passages was 25% for the pretest, and 17.14% for the posttest and the number of shared words was 36. The degree of vocabulary overlap between the pretest and RR texts was fairly high at 75% with 108 shared words. However, the overlap between the posttest and RR texts was lower at 54.51% with 74 shared words.

Questionnaire. In addition to the quantitative data that were collected (see Analyses section below), responses to open-ended questions about the advantages and disadvantages of the two methods were collected from RR and ER group participants. We felt that such data might lay the groundwork for the development of more focused questionnaires which could be used to investigate the effects of both methods. The open-ended questions were intended to elicit spontaneous feedback from participants, which we could utilize to create such questionnaires. At the end of the study, participants in both the ER and RR groups were asked to list in Japanese some advantages and disadvantages of either method they were assigned to in the order of importance. Participants' responses were categorized by two native Japanese speakers into themes which emerged from participants' responses (see Analyses section below). For this report, the two native Japanese speaking researchers translated illustrative participant responses into English. In addition to the questionnaire, the students were asked to give extemporaneous comments on their record sheets which were provided to help them follow the procedure of either RR or ER treatment. This "extemporaneous comment venue" was meant to elicit spontaneous feedback from the students about each RR or ER session that they had just finished.

Procedure

This project was conducted for 17 weeks from the middle of May to the end of November, 2001. About one-third to half of each regularly scheduled English class was spent on the project for both RR and ER groups. The implementation of RR treatment was based on Taguchi (1997), and Taguchi and Gorsuch (2002). The RR treatment period for the current study was extended from 10 weeks to 17 weeks, and the total number of RR sessions from 28 to 42. It was believed this would result in an intensification of the positive effects of RR. The RR group in the current study followed the procedure described below for the 42 treatment sessions:

1. Students read the previous passage to remember what they had read in the last session. This step was skipped only when they started a new textbook.
2. Students timed their first reading of a passage with a stopwatch.
3. Students read the passage two times while listening to the exact audiotaped version with headphones.
4. Students read the passage silently two more times and timed each of their readings with a stopwatch.
5. Students wrote a book report about what they had read in the story passage.

Participants were encouraged to read fast, but not to sacrifice their comprehension just to read fast. Participants checked off the number of repetitions they made and recorded the time they took to read each passage on a record sheet. When participants missed an RR session, a make up session was set up.

The ER group engaged in ER during the same time frame the RR sessions were held (17 weeks). ER participants read books during class times only to maintain equivalence of scheduled reading time with RR participants. The ER participants read books of their choice progressively from easier to more difficult. They were told that they could change the book they were reading if it was not interesting to them. There was no reading aloud of a common reader to ER participants. Participants kept detailed records of the date of each session, their starting and ending pages and lines, and their starting and finishing reading times. As with RR participants, when ER participants missed a session, a make up session was set up.

For the pretest, both RR and ER groups read the pretest passage five times. Following the first, third, and fifth readings, both RR and ER groups answered the same set of eight pretest comprehension questions. For the posttest, this process was repeated.

Analyses

To answer research question (RQ) #1, whether RR is effective for developing reading fluency of FL readers, the average silent reading rates of RR participants for the first and fifth readings for all forty-two RR sessions were calculated. Standard deviation, skewness, and kurtosis were also calculated for the first readings of the first and forty-second sessions to check for normality to determine whether parametric or non-parametric comparisons should be used. During this part of the analyses, one case of the RR group data was found to be an outlier with a silent reading rate for the last RR treatment passage at 27.79 WPM, far lower than even the second smallest

WPM of 50.46. This case was deleted and excluded from the analysis for RQ #1. To show average change for the RR group from the first to the forty-second sessions, we compared the average first reading rate of the first four sessions with that of the last four sessions using a paired t-test with the alpha level set at .05. To investigate whether there were facilitation effects for RR *within* each session of five re-readings, the average reading rates for the first and fifth readings of all 42 sessions were calculated, along with standard deviation, skewness, and kurtosis. To determine whether average gains from the first to the fifth sessions were statistically significant, a non-parametric Wilcoxon Pairs Signed Rank Test was conducted with the alpha level set at .05.

To answer RQ #2, whether RR is as effective as ER to develop reading fluency of FL readers, the average words per minute for the RR and ER groups on the first, second, third, fourth, and fifth readings of the pretest and posttest passages were calculated. To check for statistically significant differences between the two groups, the following comparisons between the RR and ER groups were made: the average WPM for first readings (RR and ER) and fifth readings (RR and ER) of the pretest, and the first (RR and ER) and fifth (RR and ER) readings of the posttest. Four Mann Whitney U tests were used with the *p* value set at .0125 (.05 divided by 4 for four comparisons).

To answer RQ #3, whether RR is as effective as ER to improve reading comprehension of FL readers, descriptive statistics for the first, third, and fifth session pretest and posttest comprehension scores were calculated. Two types of comparisons were made: one type focused on gains in comprehension pretest and posttest scores *within* RR and ER groups, and the other type focused on differences in gains *between* RR and ER groups. To determine whether gains within groups were significant, four comparisons were made: for the RR group, first and fifth pretest scores and first and fifth posttest scores; for the ER group, first and fifth pretest scores and first and fifth posttest scores. The Wilcoxon Matched-Pairs Signed-Ranks Test was used with the *p* value set at .0125 (.05 divided by 4 for four comparisons). To determine differences between the RR and ER groups, four comparisons were made: RR and ER first pretest scores, RR and ER fifth pretest scores, RR and ER first posttest scores, and RR and ER fifth posttest scores. Four Mann-Whitney U tests were used with the *p* value set at .0125 (.05 divided by 4 for four comparisons).

To answer RQ #4, how FL readers perceive the effectiveness of RR or ER, the prose responses of both ER and RR participants on the open ended questionnaire item were categorized by the first Japanese author of this study according to themes that emerged from the data. We intended to obtain a comprehensive feedback from the students about either method they were assigned to, and to make the analyses easier, the importance rank order of their responses was not considered. To check for reliability of the categorizations, the second author, a native Japanese speaker, was given the themes and the data and then asked to categorize the data. Any differences were resolved through discussion. Extemporaneous comments from participants written on their RR and ER record sheets were also categorized according to themes emerging from the data and then checked for the reliability.

Results

Research question #1: Transfer of reading fluency gains for the RR group

The results of the present study seemed to support the hypothesis that RR is effective in developing fluency in FL readers, as is shown in Tables 3 and 4 below:

Table 3: Descriptive statistics for silent reading rates (words per minute) of the first and fifth readings of the RR group from the first to forty-second session

	1st Reading (WPM)		**5th Reading (WPM)**	
	M	*SD*	*M*	*SD*
1	78.20	14.63	103.52	43.42
2	82.46	13.83	116.81	51.29
3	86.09	13.78	123.99	31.57
4	89.28	13.31	127.50	43.65
5	89.84	21.42	143.32	69.46
6	88.50	32.07	127.59	41.76
7	89.72	13.55	128.55	50.03
8	89.68	16.91	133.60	61.48
9	94.42	19.44	132.22	45.50
10	102.13	18.64	131.76	36.37
11	98.47	17.26	130.88	35.29
12	97.98	17.01	125.70	33.11
13	97.68	16.22	121.06	30.08
14	96.19	15.78	133.19	28.15
15	98.39	23.18	135.12	50.47
16	103.95	24.03	128.17	53.16
17	92.56	13.46	110.40	24.22
18	93.64	22.62	122.25	53.00
19	93.97	14.20	129.51	54.02
20	96.78	11.82	118.31	35.42
21	102.03	12.87	115.99	36.75
22	96.53	13.57	116.72	21.22
23	92.96	15.94	111.61	25.65
24	105.88	16.06	122.53	33.83
25	87.69	20.30	142.82	80.44
26	94.99	18.41	128.41	57.34
27	89.55	22.66	139.83	59.56
28	91.14	18.98	116.87	16.44
29	99.91	28.67	139.24	73.49
30	95.95	20.66	130.55	33.71
31	90.16	22.39	129.67	22.40
32	102.27	15.57	122.52	26.48

33	104.40	14.64	133.92	38.46
34	107.63	19.80	132.85	35.97
35	110.71	23.50	137.83	35.02
36	110.23	27.11	148.63	32.15
37	107.16	19.77	142.79	30.94
38	113.08	17.06	144.43	36.72
39	105.14	22.42	143.33	40.51
40	116.43	28.00	136.68	29.70
41	104.21	23.10	128.04	42.03
42	101.87	23.87	120.88	27.06

Note: The first through twenty-fourth sessions were for reading *The Missing Madonna*. The twenty-fifth through forty-second sessions were for reading *Away Match.*

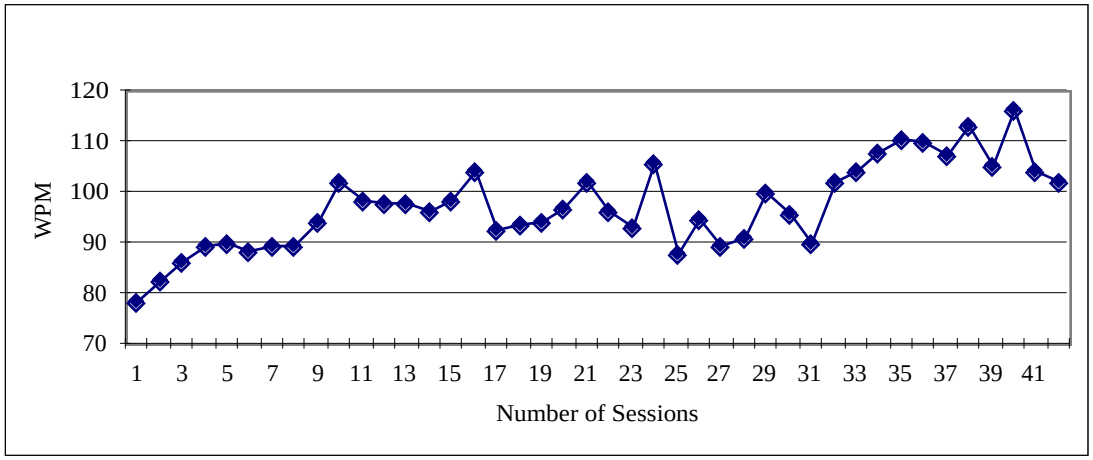
Table 3 illustrates a steady increase of reading rate. Looking at first readings for each RR session, there is an overall increasing movement in terms of words per minute. During the first session, participants read 78.20 words per minute on average. During the 24th session, they read on average 105.88 words per minute. The RR group finished the first book, *The Missing Madonna*, at the 24th session and started reading the second book, *Away Match*, at the 25th session. While there was a drop in silent reading rate from 105.88 in the twenty-fourth session to 87.69 in the twenty-fifth session, participants' average reading rates resumed an overall increasing movement, reaching an average 101.87 words per minute for the 42nd session.

Table 4: Descriptive statistics for average silent reading rates (WPM) of first readings for the first and forty-second RR sessions

First session (*n* = 9)			
M = 78.20 words per minute	*SD* = 14.63	Skew = -.03	Kurtosis = -1.36
Forty-second session (*n* = 9)			
M = 101.87 words per minute	*SD* = 23.87	Skew = -.62	Kurtosis = -.58

Table 4 shows in a more focused way the gains in reading rate from the first to last of the forty-second RR sessions. See also Figure 1 below, which depicts in graphic form RR participants' increases in average silent reading rate over the entire course of the treatment. An overall increasing trend from the first to the forty-second session is apparent.

Figure 1: Average WPM for the first reading



As Figure 1 indicates, it seems that the RR group showed some fatigue at the end of the experiment for the last two sessions. We thought it would be more reliable to see the gains in WPM by comparing the average of the first four sessions with that of the last four sessions. When looked at this way, the RR group read at 83.97 in WPM on average for the first four sessions and their average reading rate increased to 107.04 for the last four sessions. This is a gain of 23.07 WPM. A paired samples t-test indicated the RR group's WPM gain was significant at $p < .001$ ($t = -5.498$, $df = 38$). The average readability scores of Flesch-Kincaid, Fog, and Fry formulas for the first four session passages and the last four session passages were 5.47 (SD = 1.66) and 4.92 (SD = 1.55) respectively, and thus approximately equal.

There is also evidence that participants' reading fluency was facilitated by RR within individual sessions. See Table 5 below:

Table 5: Average silent reading rates (WPM) for first and fifth readings for all forty-two RR sessions

Average first readings			
M = 97.38 words per minute	SD = 8.40	Skew = .13	Kurtosis = -.23
Average fifth readings			
M = 128.80 words per minute	SD = 10.17	Skew = -.25	Kurtosis = -.21

Overall, participants read faster within individual RR sessions as they read the text repeatedly. The average gain score from the first to the fifth readings within sessions was 31.42 WPM. A Wilcoxon Pairs Signed Rank Test indicates this is a statistically significant increase at $p < .05$ ($z = -5.645$).

Research question #2: Comparisons of RR and ER group fluency

The results suggest that RR and ER are comparable in facilitating participants' reading fluency, with the RR group having slightly higher word per minute reading rates. See Table 6 below:

Table 6: Descriptive statistics for silent reading rates (WPM) of the first through fifth readings of the RR and ER groups on the pretest and posttest

Pretest	RR Group (*n*=10)			
	M	*SD*	skewness	kurtosis
1st	84.84	19.38	-0.063	-1.854
2nd	78.11	20.67	-0.223	-0.660
3rd	97.38	13.53	-0.206	-0.828
4th	104.65	19.14	-1.061	1.193
5th	136.39	62.96	2.745	8.100

Pretest	ER Group (*n*=10)			
	M	*SD*	skewness	kurtosis
1st	80.88	19.14	0.029	-0.087
2nd	80.21	22.73	1.227	0.946
3rd	105.01	32.21	0.375	-0.220
4th	103.89	40.41	2.080	4.861
5th	119.45	46.25	0.772	0.241

Posttest	RR Group (*n*=10)			
	M	*SD*	skewness	kurtosis
1st	82.28	17.11	-0.360	-0.823
2nd	81.76	22.44	-0.261	-0.671
3rd	93.70	18.26	-0.310	-1.036
4th	90.71	24.47	-0.182	-0.771
5th	115.24	22.88	0.133	0.805

Posttest	ER Group (*n*=10)			
	M	*SD*	skewness	kurtosis
1st	64.48	20.30	0.541	1.771
2nd	66.01	22.22	0.801	-0.357
3rd	83.45	27.60	0.228	-0.223
4th	83.36	27.53	0.066	-0.877
5th	108.24	32.88	0.260	-0.638

On the pretest, participants in both RR and ER groups performed similarly. Both RR and ER groups gradually increased in silent reading rate with each repeated reading of the pretest text, with the RR group increasing from 84.84 WPM to 136.39 WPM and the ER group increasing from 80.88 WPM to 119.45 WPM. Pretest similarities between the RR and ER groups are

underscored by nonsignificant Mann Whitney U comparisons at $p < .0125$ between the RR and ER groups on the first reading and again on the fifth reading of the pretest. On the posttest, the RR group started out reading faster for the first reading (RR group = 82.28 WPM, ER group = 64.48 WPM). Despite a difference of 17.82 WPM on the first reading of the posttest for the two groups, a Mann Whitney U comparison was not significant at $p < .0125$. Both RR and ER groups improved over repeated readings, although the RR group's silent reading rate remained slightly higher than the ER group's. At the fifth reading of the posttest passage, the RR group averaged 115.24 WPM while the ER group averaged 108.24 WPM. However, a Mann Whitney U test indicated that this difference was not significant at $p < .0125$.

Research question #3: Reading comprehension of the RR and ER groups

Within themselves, both RR and ER groups increased their comprehension scores on both pretests and posttests as the number of readings multiplied. In terms of comparisons between groups, the RR and ER groups performed similarly on pretest and posttest comprehension measures. Table 7 below gives descriptive statistics for the comprehension scores on the first, third, and fifth readings of the pretest and posttest passages for the RR and ER groups.

Table 7: Descriptive statistics for RR and ER groups' comprehension scores on the pretest and posttest

Pretest

RR Group	*M*	*SD*	Min	Max	Skew	Kurtosis	*n*
First	1.60	2.32	0	6	1.14	-0.18	10
Third	4.00	3.06	0	9	0.23	-0.76	10
Fifth	6.50	4.60	2	15	0.70	-0.64	10

ER Group	*M*	*SD*	Min	Max	Skew	Kurtosis	*n*
First	1.90	2.51	0	8	1.82	3.62	10
Third	6.80	4.87	0	14	0.25	-1.14	10
Fifth	8.30	4.55	0	16	-0.09	0.28	10

Posttest

RR Group	*M*	*SD*	Min	Max	Skew	Kurtosis	*n*
First	3.90	3.35	0	12	1.68	3.66	10
Third	8.40	2.32	4	12	-0.48	0.19	10
Fifth	8.80	2.53	6	12	-0.13	-1.87	10

ER Group	*M*	*SD*	Min	Max	Skew	Kurtosis	*n*
First	4.50	3.50	0	12	0.76	1.51	10
Third	7.80	3.16	2	12	-0.57	-0.34	10
Fifth	10.10	2.38	6	12	-1.14	-0.11	10

Note: Pretest and posttest K = 16.

For the pretest and posttest, the average comprehension scores of both RR and ER groups increased as the number of re-readings and re-testings grew. The RR group's gain of 4.9 points from the first to fifth pretests were statistically significant using the Wilcoxon Match Pairs Signed Ranks Test at $p = .0051$, $z = -2.803$; the ER group's gain of 6.4 was also statistically significant at $p = .0077$, $z = -2.666$. The RR group's gain of 4.9 points from the first to fifth posttests was statistically significant at $p = .0077$, $z = -.2666$; and the ER group's gain of 5.6 points was significant at $p = .0077$, $z = -.2666$. In addition, the first reading comprehension scores for both groups were somewhat higher on the posttest than on the pretest (2.3 points higher for the RR group, from 1.60 to 3.90, and 2.6 points higher for the ER group, from 1.90 to 4.50). However, as far as comprehension scores are concerned, the RR and ER groups were not distinctly different from each other. On both the pretest and posttest, the ER group seemed to outperform the RR group slightly. The ER group scored .3 points and 1.8 points higher than the RR group on the first and fifth pretests; and .6 points and 1.3 points higher on the first and fifth posttests. However, none of the comparisons between the RR and ER groups were statistically significant using Mann Whitney U test.

Research question #4: Participants' perceptions of the effectiveness of RR and ER

The response data from the questionnaire revealed the following themes: 1) changes in participants' willingness to read long passages; 2) learning to deal with unknown words in a text; and 3) extended exposure to reading input. The researchers also noted some themes that were unique to RR participants. Thus, RR participants' data was further categorized into two themes: 4) The role of repetition in developing reading fluency and comprehension; and 5) The effect of RR simultaneous audio recordings on participants' listening skills development. Moreover, the RR group participants' extemporaneous comments from the record sheets indicated the unique role the auditory model played to facilitate their comprehension of narrative and dialogic texts, motivation to read the texts, and comprehension of new words through pronunciation models provided by the audio recordings.

Participants in both RR and ER groups stated that the two reading methods increased their willingness to read long passages. Six out of ten RR participants and six out of ten ER participants mentioned that the reading methods they had used helped them enjoy reading long passages in English. Note that "six out of ten participants" means that six out of ten participants made responses following this theme. It does not mean that the remaining four out of ten respondents had negative things to say about RR or ER. One RR participant wrote: "The stories were really interesting and I enjoyed every session of reading." An ER participant wrote: "Reading long English passages is no longer difficult or painful." Participants in both groups also noted that they became more able to deal with unknown words by using either contextual clues or simply by skipping words that seemed unimportant. Their responses suggest an interplay between reading fluency and the higher-order metacognitive skills. Four RR and five ER participants mentioned using both strategies more as they continued in the programs. One RR participant noted: "Through re-reading, I became able to guess the meaning of the words I didn't know." Another RR participant wrote: "At the beginning reading in English was difficult, but I gradually got used to it, and became able to guess the meaning of unfamiliar words from the context." In addition, both RR and ER groups noted positive effects on their second language development as a result of being afforded access to large amounts of L2 input through reading:

two RR participants and three ER participants noted this and said it gave them great satisfaction. Also, both groups thought they built vocabulary through reading. For example, one RR participant said: "I was able to review the words and phrases that I had forgotten." An ER participant wrote: "I've learned a variety of sentence structures and new vocabulary words."

RR participants commented on features of the RR reading treatment which set the RR and ER treatments apart. Participants' responses suggest that repetition in RR plays a powerful role in improving FL readers' comprehension. Five RR participants noted that repetition helped them understand story passages better. Repeated reading of the same passage improved their understanding of what was happening in the story passages and even the details. One RR participant wrote, "Repeated reading helped me understand the details of the story I was reading, and this in turn made me wait anxiously for the next portion of the story." Another RR participant wrote that it was reassuring to know beforehand that she could read a given text again. Another advantage the RR group noticed was some positive effects of assisted RR on the development of their listening skills. Four students wrote RR improved their listening skills. Finally, one RR participant suggested that participating in a RR program led her to a stronger metacognitive awareness of her learning, noting: "I became able to distinguish the part of the textbook I haven't understood from the rest of the textbook that I have understood."

Compared to extensive responses on the benefits of RR and ER, there were some responses that suggest difficulties the participants had about either method they were assigned to. One of the difficulties both groups had in common was with unfamiliar words they encountered while reading. Four students in the RR group and two students in the ER group reported they had difficulties in dealing with unfamiliar vocabulary words. One student in the RR group wrote, "I had difficulty in dealing with unfamiliar words when I couldn't guess their meanings from the context." Another student suggested that some vocabulary assistance be incorporated in the RR implementation. Two students in the ER group made a similar suggestion about the need to incorporate vocabulary help in the ER implementation, and said that they were not able to look up the words they didn't know and they remained unknown because the books were available only during the reading sessions.

Some feedback from the students' extemporaneous comments on their record sheets

Participants' extemporaneous comments showed some advantages for both RR and ER. Many comments were similar to the feedback given in the questionnaire, indicating that both methods enhanced readers' willingness to read long passages, made reading enjoyable, and developed their ability to deal with unknown words. Among the comments, however, was one striking feature that differentiated RR from ER. It is the facilitative role an auditory reading model plays in RR. The auditory model helped students understand stories better. Eight out of ten RR participants commented that listening to the audiotapes while reading the matching passages enhanced their comprehension. Five of them wrote that it was easier to read a story passage while listening to the audiotape. In addition, three RR participants suggested that the use of an audiotaped reading model coupled with RR improved their grasp of conversational dialogs in the texts, stating that reading the conversations with a reading model read by different characters enabled them to understand better. RR participants' reading comprehension was also improved by the audiotapes that made reading more pleasurable, and more informative of the L2 spoken

mode. Three RR participants wrote that listening to the reading model with different characters and sound effects was fun and useful while they read. And two RR participants noted that the audiotaped reading model gave them access to the pronunciation of unknown words they encountered in the passages.

Discussion

In the Discussion section, we will outline four related areas of relevance to the study: reading fluency development, reading comprehension development, insights offered by participants in their comments, and testing issues.

The development of reading fluency

The present study suggests that RR is effective in increasing the fluency of beginning-level FL readers. We believe that RR cannot be discounted as a significant means for developing reading fluency of second and foreign language learners. Learners' fluency increased not only within RR sessions, but also over the course of the RR treatment. This fluency development reflects the combined facilitative effect of enhanced word recognition skills and better comprehension through RR (Levy, Nicholls, and Kohen, 1993). The readers read each new passage closely and increasingly faster as the number of RR sessions progressed. Consequently, the reading gains from practiced passages were transferred to new unpracticed passages.

It is interesting to note that the first reading rates did not grow rapidly for the first several sessions when starting a new story, but that silent reading rate rose sharply for the subsequent sessions. Figure 1 above illustrates how RR group's reading rates grew for the entire RR treatment. One explanation is that participants may have needed practice in identifying recurring vocabulary words used in the text before they could capitalize on practice gains to facilitate their reading rate later in the text. Although participants read each new passage portion progressively faster overall, the pace of improvement was gradual. This may be due to the limited number of re-readings in each session in the present study. The students read the same passage five times in each RR session. The gains might have been greater if they were allowed to read a few more times, as in Taguchi and Gorsuch (2002), where participants re-read passages seven times.

The comparisons of fluency development between RR and ER groups have suggested general positive effects from both the RR and ER treatment. As Table 6 indicates, while RR and ER participants read the pretest with the same degree of fluency, RR participants read somewhat faster than ER participants on the posttest. The nonsignificant differences between the RR and ER groups' reading rates on the first and fifth posttest passages may have been caused by the testing procedure. For RQ #1, we showed that reading a passage repeatedly was effective for increasing learners' silent reading rate within RR sessions of five re-readings apiece. In the posttest, both the RR and ER group may have benefited in the short term from the RR methodology used to conduct the posttest.

The development of reading comprehension skills

Automaticity Theory (LaBerge and Samuels, 1974; Samuels, 1994) suggests that readers with automated word recognition skills are better comprehenders. The theory posits that, to perform a complex skill such as reading, a portion of this skill should be executed with little attention. That is, word recognition skills such as feature extraction, orthographic segmentation, and phonological coding should not take up much in the way of cognitive resources. The concern here is that higher-order postlexical comprehension processes are highly resource-demanding. As readers develop automaticity in word recognition skills, they can direct more cognitive resources to comprehension, and achieve better comprehension as a result. The RR group, however, was not able to enhance their comprehension performance even after their word recognition skills improved. One explanation Automaticity Theory can provide is that the enhanced word recognition skills of the RR group reflected in the 23.67 word gains in WPM from the first to forty-second RR sessions may not have been sufficient to significantly boost their comprehension performance. The amount of attention freed up by improved word recognition was not sufficient to secure better comprehension.

Verbal Efficiency Theory (Perfetti, 1985) and Attentional Resource Emancipation (Reynolds, 2000) offer additional explanations: while Automaticity Theory concerns only pre-lexical processes of decoding, Verbal Efficiency Theory contends that even postlexical processes used in reading can be automated with practice. Based on Verbal Efficiency Theory, Attentional Resource Emancipation (ARE) explains differences between good and poor reading performances from an attentional resource allocation perspective. ARE assumes a hierarchy of postlexical comprehension processes based on the amount of attentional resources expended. Lower level comprehension processes such as using headings and subheadings to guide understanding and attending to topic sentences and important elements in the text initially need conscious use of attentional resources, but these basic processes become automated over time through practice. On the other hand, some higher level comprehension processes such as monitoring strategies to achieve reading goals always require a considerable amount of attentional resources. The more attentional resources are freed from basic comprehension, the better comprehension readers can achieve. According to ARE, poor readers with reasonably automatic decoding skills but poorly developed comprehension processes are unable to achieve good comprehension. Inefficient basic level comprehension processes require a significant amount of attentional resources, and consequently leave too little attention available for higher level comprehension processes of monitoring comprehension and coordinating reading strategy use. If this scenario holds, the RR group may not have been able to allocate their attentional resources effectively and efficiently in order to achieve better comprehension. Their basic comprehension skills such as identifying important elements in the text, integrating propositions, resolving anaphors, activating relevant schema from memory were possibly underdeveloped. Consequently, their higher level comprehension skills were not used. Some empirical support for the role of postlexical processing in reading and readers' automatization of these processes can be found in various studies (Kintsch, 1993; Pressley and Afflerbach, 1995).

Participants' perceptions of the effectiveness of RR and ER

The participants' responses provided intriguing insights on the effectiveness of both RR and ER. We found that RR and ER share advantages. Both methods increase readers' willingness to read long passages, and develop their ability to deal with unknown words. RR and ER provide learners with a substantial amount of L2 input, and promote their vocabulary growth through reading. In addition, participants' comments clearly exhibited some features that are exclusive to RR. Five out of ten RR group participants indicated that the repetition of reading improved their comprehension, and that they became able to understand even the details of the story passages. This repetition component of RR possibly provides scaffolding for the beginning-level readers in the present study (Vygotsky, 1978; Feitelson, Goldstein, Iraqui, and Share, 1993). It is likely that the high level of comprehension which learners achieved in each RR session engaged them in an enjoyable reading experience they may have never experienced before.

The use of an auditory model is the other unique component of RR. The questionnaire responses did not focus on this aspect of RR, yet eight out of ten RR participants spontaneously commented the positive role of the audio reading model in their extemporaneous comments. The auditory model may be another form of scaffolding that students utilized to keep them motivated and willing to read. Furthermore, one response about metacognitive awareness is interesting because it may provide a new perspective on the effects of RR: these responses indicate that the student was closely monitoring her comprehension. Clay (1991: 184) suggests that re-reading familiar text allows readers to develop the ability to coordinate all of their language resources, schemata, and strategic reading behaviors to process print and to become independent readers as a result. The repetition of reading can enable readers to free their attentional resources and to engage in higher level comprehension monitoring. These metacognitive skills are definitely needed for the readers to become independent readers.

Some problems with the tests

The first problem with this study is the equivalence of the pretest and posttest. The pretest and posttest are found to be unequal as to measuring silent reading rate and comprehension. For these reasons, and because the pretest and posttest passages were on different topics and included different comprehension questions, these tests should be considered independent measures. To explore this issue, equivalent forms reliability was estimated by administering the pretest and posttest to two different groups of six students in the same school, whose English language proficiency was similar to the study participants. One group took the pretest first and then the posttest, and for the other group the order was reversed. The reliability estimate was .567 for the comprehension items, and .338 for students' WPM reading rate of the pretest and posttest passages. Thus, the pretest and posttest were not equal for EFL readers even though these tests are considered to be equal for English L1 readers. In terms of the comprehension tests, the pretest was slightly more difficult than the posttest (pretest M = 1.42, posttest M = 3.58). The pretest passage, however, was read faster than the posttest by almost 10 words in WPM, suggesting the readers felt more easiness with the pretest passage than the posttest passage (pretest M = 75.16, posttest M = 65.24).

Another testing issue is the RR and ER groups' readiness for fluency building training. The difficulties some participants said they experienced with unfamiliar vocabulary words while reading may indicate that they were not ready for fluency training. For fluency building, the participants would need to have learned almost all the words in the text but would not have yet developed adequately fast reading rates.

Still another testing issue is how best to measure reading comprehension of FL readers. Inefficient text processing of beginning-level FL readers in the present study may have led to their poor performances on the comprehension tests. As in many studies on RR, the participants in the current study were not allowed to refer to the text when answering comprehension questions. It is likely that the beginning-level readers in the present study did not process the test passage efficiently, and it may have been difficult for them to understand and retain the text information before answering the comprehension questions. A final problem is the small sample size: the sample size of 20 in the present study is not sufficiently large to eliminate idiosyncratic results in terms of the test instruments.

Directions for Future Research

Why some readers fail to improve their comprehension even after their reading fluency is enhanced should be investigated. Automaticity Theory posits that attentional resources freed from decoding tasks should improve reading comprehension. However, this contention has not been empirically supported so far in past L2 or FL RR research (e.g., Taguchi and Gorsuch, 2002). Further research on RR should be done to investigate the relationship between reading fluency and comprehension skills with a larger sample and better tests. The Verbal Efficiency Theory and Attention Resource Emancipation seem to provide us with thought provoking perspectives. If we can understand how good and poor readers differ in their awareness of reading strategies and allocation of their attentional resources depending on their reading goals, then we will be able to know this missing link.

Conclusion

The results of the present study show that RR is as promising a method as ER for enhancing second and foreign language readers' fluency. The RR group steadily and consistently enhanced their initial silent reading rate of new passages over the entire treatment course. Participants' responses to the questionnaire suggest that RR facilitates fluent reading by providing FL/L2 readers with a unique form of scaffolding: the use of repetition and an auditory model of reading. Thus, RR has potential to rival and strongly facilitate ER as a means of fluency building, and allowing FL/L2 learners to become independent readers. As learners become able to read faster, they come to enjoy reading. If they can enjoy reading, their access to language input will increase dramatically, which will further promote their language development.

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About the Authors

Etsuo Taguchi is an associate professor at Daito Bunka University, Tokyo, Japan. He is interested in reading processes, especially the relationship between lower identification skills and higher comprehension skills. He is also interested in metacognition in L2/FL reading.
mailing address: Department of Japanese, Faculty of Foreign Languages, Daito Bunka University, 1-9-1 Takashimadaira, Itabashi-ku, Tokyo175-8571 Japan
email address: taguchi@ic.daito.ac.jp

Miyoko Takayasu-Maass teaches at Seigakuin University and is also a part-time lecturer at Daito Bunka University in Japan. She has recently edited a weekly English magazine, *Speak English* (DeAgostini Japan). Her special research interests include reading, learner strategies, and listening.
e-mail: m.meisu@seigakkuin-univ.ac.jp

Greta J. Gorsuch lived in Japan for many years before returning to the U.S. She teaches courses in applied linguistics and is also director of International Teaching Assistant Training Program at Texas Tech University. She is interested in language testing, international teaching assistant development, and reading in English as Foreign Language contexts.
e-mail: greta.gorsuch@ttu.edu