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Narrow reading: Effects on EFL learners' reading speed, comprehension, and perceptions

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Abstract

This study compared the reading speed, comprehension and perceptions of two groups of English as a foreign language (EFL) learners. Each group addressed one of two types of narrow reading: same genre and same title. The same genre texts were three graded readers in the *Sherlock Holmes* series, and the same title texts were *The Railway Children*, published by three different publishers at different language levels. The study was conducted over a 3-week period. Then, two approximately 1,000-word texts, one related to Sherlock Holmes and one to *The Railway Children*, were used to measure whether the participants' reading speed and comprehension differed in reading the two types of texts. The results showed that all participants read significantly faster and comprehended more with the related text than the unrelated text. A questionnaire on participants' perceptions showed positive responses to narrow reading, especially the same title treatment. Pedagogical implications are discussed.

Keywords: narrow reading, reading speed, reading fluency, reading comprehension

This study explored an under-researched area—narrow reading—on English as a foreign language (EFL) learners' reading fluency and perceptions. Although narrow reading is not a newly coined term (see Krashen, 1981), very little research has been done on it. Narrow reading refers to readers focusing on the work of a single author or a single topic over the course of a number of texts for an extended period of time (Krashen, 1996; McQuillan, 2016; Schmitt & Carter, 2000). It can also be considered another approach to (or a subset of) extensive reading (wide reading), but the two differ in how texts are selected or organized. The texts in narrow reading are related to each other, which means that learners do not have to switch from one topic to another or call on completely new background knowledge to comprehend different texts. This may allow learners to process the input more smoothly. Related texts also contain fewer word types because key words and proper nouns are more likely to recur across texts, which may ease the lexical burden (Gardner, 2008; Schmitt & Carter, 2000). Given the advantages of narrow

reading—more familiar background knowledge and less lexical burden—it is likely that readers can efficiently improve their reading fluency, i.e., reading rate (speed) and comprehension. These two components are associated with each other, and reading fluency is defined as "decoding and comprehension at the same time" (Samuels, 2006, p. 9). Decoding refers to readers having to rapidly process the lower-level components, such as orthographic, phonological, syntactic and semantic information, and then drawing on background knowledge and making inferences. While reading fluently, readers must process all these components automatically, which may be difficult for second language (L2) learners, in particular for lower-level processing (Grabe, 2009). Automaticity theorists suggest making some components more automatic, which may allow readers to pay more attention to the tasks that need more controlled attention. Given this, narrow reading seems to provide optimal conditions for developing fluency.

Even if readers can automatically decode the linguistic elements and make inferences, their reading rates may not be constant. According to Carver (1992), reading rates are so changeable that it may be impossible to predict what a given student's reading rate will be under a given set of conditions. A number of factors may affect reading rates and the level of reading comprehension. Some of these are reading purpose, text difficulty, vocabulary load, the amount of reading experience, and background knowledge. Carver (1990) proposed five *gears* of reading for first language (L1) adult readers: scanning, skimming, rauding, reading to learn, and reading to memorize; each gear having a different rate and involving different levels of cognitive processes. The highest gear is *scanning*, the fastest reading process; its goal may be just to identify a target word in a text. The second highest gear is *skimming*; its purpose is to find specific information or simply to comprehend the gist of a text. The third gear, *rauding*, refers to a combination of reading and auding (listening); its goal is general comprehension. The typical rauding rate is approximately 300 words per minute (wpm) for college students, and this rate may represent an individual's natural or optimum reading speed. This gear involves processing the low and high level components of fluent reading. The second lowest gear is *reading to learn*. It is usually used by students to learn information from textbooks. This gear operates at 200 wpm and requires some effort to synthesize what is read. The lowest reading gear is *reading to memorize*. It requires readers to be able to recall information accurately. It is believed to occur at 138 wpm for college students. However, these proposed reading rates are for educated L1 readers. For L2 readers, the rates have been found to be much slower (See Chang & Millett, 2015).

Apart from reading purpose, an individual's reading experience may, to some degree, affect reading rates and comprehension levels. It is generally agreed that a more experienced reader has better decoding skills, so their reading rate is faster. Another factor is the difficulty of the text. If the text's relative difficulty exceeds one's reading abilities, both reading rates and comprehension levels will decline. Text difficulty may arise from an individual's lack of vocabulary knowledge or topical knowledge of the field, and it is the most common issue for most L2 readers. Hence, this study will particularly look into these two factors, which will be reviewed below.

Narrow reading may provide some optimal conditions, such as better background knowledge and repetition of key lexical items. However, the practice of using narrow reading to facilitate learning is still an under-researched area. To my knowledge, there has been no research

investigating the effect of narrow reading on developing reading fluency. However, there are some studies looking into learning vocabulary through narrow reading, and reviewing some of the relevant studies may assist our understanding of the role that vocabulary plays in narrow reading.

The Role of Vocabulary in Narrow Reading

Some corpus-driven studies have shown that narrowly reading a series of related texts recycles vocabulary more effectively than randomly reading unrelated texts (Hwang & Nation, 1989; Rodgers & Webb, 2011; Schmitt & Carter, 2000; Sutarsyah, Nation, & Kennedy, 1994). For example, both Hwang and Nation (1989), and Schmitt and Carter (2000) compared related and unrelated newspaper stories and found that the density of new word families decreased significantly in the related stories but less so in the unrelated stories. This finding suggested that vocabulary load was reduced to a greater extent in reading related stories. Schmitt and Carter posited that reading related stories lowers the lexical load for L2 learners, and thus might allow learners earlier contact with authentic reading materials. Similar results are found in reading academic texts versus random texts (Sutarsyah et al., 1994), and viewing related versus unrelated television episodes (Rodgers & Webb, 2011).

These corpus-driven studies provide consistent evidence that texts on the same or related topics are more likely to have more recurrences of specialized words than unrelated texts. Empirical studies also provide support for corpus-driven research (Cho, Ahn, & Krashen, 2005; Cho & Krashen, 1994; Kang, 2015). For example, Cho and Krashen (1994) asked four L2 adults to read the *Sweet Valley* series for pleasure in their free time, and then assessed their vocabulary acquisition rates in individual tests. The average vocabulary learning rate reported was 62%. Positive results were also reported in a later study with young L2 Korean elementary school pupils (Cho, Ahn, & Krashen, 2005) who were asked to read the *Clifford* book series. Recently, a more rigorous study was conducted by Kang (2015) with senior high school students who read four online texts, either thematically related articles on second-hand smoking or unrelated articles, over one month. The students were tested on their gains of receptive and productive vocabulary knowledge. The results showed that narrow reading led to better gains than random reading in both receptive and productive knowledge.

The Role of Background Knowledge in Narrow Reading

As previously mentioned, reading comprehension takes place when readers draw on what is decoded and then relate this to their background knowledge, which can be general knowledge, cultural knowledge or knowledge of a certain topic or discipline. A number of studies have shown that familiarity with the background knowledge of a text enhances comprehension (see Hudson, 1982; Pulido, 2004, 2007; Taglieber, Johnson, & Yarbrough, 1988). One efficient way to gain specific background knowledge or contextual knowledge is narrow reading. According to Lamme (1976), good L1 English readers tend to read books from the same series or books written by a single author or books on a single topic. In their series study, Cho and Krashen (1994, 1995a, 1995b) reported that their EFL learners, who had never experienced the pleasure

of reading in English, became Sweet Valley fans. In just one year, they read *Sweet Valley Kids*, *Sweet Valley Twins* and then *Sweet Valley High*. After reading the whole series, one learner read an additional four Harlequin Romance novels, and eight novels by Danielle Steel and Sydney Sheldon. The above studies suggest that reading a series of related texts may enhance readers' background knowledge, which further motivates them to read more and eventually become a good reader.

Improving Reading Rates in L2 Learning

Despite all of these convincing findings on acquiring vocabulary through narrow reading, there are no studies that look at whether L2 students can comprehend better and read faster through reading related texts rather than unrelated ones. There are, however, several approaches that have been recommended by second language scholars to improve L2 learners' reading fluency. For example, repeated reading—rereading the same texts several times until a satisfactory rate is achieved (Dowhower, 1987; Gorsuch & Taguchi, 2008, 2010; Gorsuch, Taguchi & Umehara, 2015; Taguchi, Takayasu-Maass, & Gorsuch, 2004); timed reading—measuring the time spent on reading a text (see a recent work by Chang, 2012; Chang & Millett, 2013); self-paced reading, or class-paced reading (see Anderson, 1999, for details), or extensive reading (see Chang & Millett, 2015 for a recent comprehensive review). Because, narrow reading is a subset of extensive reading, the two differing only in the selection of texts, it is useful to briefly review how extensive reading improves reading rates.

A few studies look at how L2 students improved their reading rates through extensive reading (Beglar, Hunt, & Kite, 2012; Chang & Millett, 2015; Iwahori, 2008; Taguchi et al., 2004). With the exception of Chang and Millett (2015), most of these studies followed an important principle of extensive reading —readers choose their own materials (Day, 2015). However, it is not clear how students chose their books. None of these studies reported that students focused on a certain genre or a specific author. For example, Iwahori (2008) required 33 junior high students to read 28 books over a 7-week period, and the students improved approximately 29 wpm, from 84 to 113 wpm. However, reading comprehension was not measured. On the other hand, Yamashita (2008) asked 47 university students to read 11 graded readers over a 15-week period, and found a significant improvement on students' comprehension, but reading rate was not assessed. Whether reading rate and comprehension improve at the same time is unclear in these two studies.

Other studies assessed improvements in both reading rates and comprehension. For example, Bell (2001) asked 14 Yemeni adults to read extensively for two semesters, and he found that they improved 60 wpm, which was much more than the intensive reading group, which increased only 15 wpm. Beglar et al. (2012) investigated the effects of one year of reading for pleasure on the reading rate development of 97 Japanese freshmen. The results showed that the three reading for pleasure groups improved 8.02, 12.84, and 16.85 standard wpm respectively, while the intensive reading group improved only 2.97 standard wpm. Despite the increasing rates, comprehension was not sacrificed; the students remained at a high level of comprehension. Asking students to read and then answer comprehension questions, however, may have changed the purpose of reading, and it could have slowed down the students' reading rates. Therefore, their results may

not entirely reflect rauding or normal reading speed.

All the studies reviewed required students to read silently. More recently, another line of research has adopted simultaneous input of reading and listening, in which learners read and listened to the oral rendition of the text at the same time. Researchers assume that simultaneous reading and listening have the following advantages. First, reading and listening help learners to match the spoken form and written form. Second, the effect of sound makes the input more interesting and helps students to remain on task. Third, the speaker segments the texts for the learners, which help them to read faster and be weaned away from word-by-word reading. This form of input has been found to be beneficial to lower-level students (Chang & Millett, 2015; Taguchi et al., 2004). In the study by Chang and Millett (2015), 64 secondary school students read 20 graded readers during a 26-week period. One group adopted silent reading and the other simultaneous reading and listening. The results demonstrated that the simultaneous reading and listening group improved 43 wpm, whereas the silent group improved only 18 wpm. The comprehension levels were also much higher for the simultaneous reading and listening group. Given the results, more research on this form of input is warranted. Therefore, this study will adopt the technique of simultaneous reading and listening.

Research Questions

The previous studies using extensive reading to improve reading rates showed positive but slow improvement. This study investigated whether students who read a series of related texts, read faster and comprehend better than if they read unrelated texts. It also looked at how students perceived the type of input. Two groups of students were randomly assigned to read different texts. One group (termed genre-group) read different titles in the *Sherlock Holmes* series, and the other group (termed title-group) read one story—*The Railway Children*, published by three different publishers (Penguin, Compass, and Oxford) at different levels. After the treatment, all participants were given a related and an unrelated text to read, and their reading rates, comprehension levels, and perceptions were measured. This study did not attempt to look at students' reading rate improvement within the 3-week period but investigated whether reading related texts helped students to read faster and comprehend better than reading unrelated texts. Three research questions were addressed:

RQ1. Did the reading rates of the genre-group and title-group differ to a significant degree when they read familiar and unfamiliar passages?
RQ2. To what degree did the reading comprehension levels of the genre-group and title-group differ when they read familiar and unfamiliar passages?
RQ3. How did the genre-group and title-group perceive the input?

Methods

Participants

This study involved fifty-three 18-year-old Taiwanese senior high school students who were

taking a required reading class of four 45-minute sessions per week. Administrators randomly divided the participants into two groups which were termed title-group and genre-group (terms to be explained shortly). The participants took a pretest based on a 400-word passage to determine their reading speed and comprehension level. The pretest was used to measure whether the two groups were comparable at the onset of the study, but was not used for comparing their progress (not the purpose of the study). The passage described how coffee beans were discovered and how coffee became a popular drink in Ethiopia. Both the text and the comprehension questions were written by the second author for developing her students' reading speeds. The comprehension test contained 10 multiple-choice test items with four options in each question. The results showed that the title-group (T-group) read at an average of 122.95 wpm (*SD* = 16.01), and the genre-group (G-group) 127.94 wpm (*SD* = 30.86), indicating no statistically significant difference between the two groups, F (1, 51) = .53, p = .47. Similarly, the T-group scored 65.60 (SD = 8.21) and the G-group 65.32 (SD = 17.50) on the comprehension test, demonstrating comparable comprehension levels between the groups, F (1, 51) = .01, p = .94.

Study materials

Selecting appropriate texts for students to read was challenging. The process of deciding on *The Railway Children* for the T-group was particularly time consuming. The researchers first selected 15 classic titles, such as *A Christmas Carol* and *Dr. Jekyll and Mr. Hyde* from five major publishers, Oxford Bookworms, Macmillan, Cambridge English, Penguin, and Compass. Because the text levels are not quite consistent across publishers, two student research assistants scanned all the selected texts and then analyzed them using the British National Corpus/Corpus of Contemporary American English (BNC/COCA) (Nation, 2012). The first researcher, two students and one L2 teacher further read all the selected materials. Based on the vocabulary profile and the complexity of each story's scenario, *The Railway Children,* published by Penguin, Compass, and Oxford Bookworms, was the best candidate to use for the T-Group (see below for the description). Determining the text for the G-group was much easier. The choice was based on the first author's teaching experience in the area of extensive reading, in which many of her students enjoyed the Sherlock Holmes stories very much. The Oxford Bookworms series also publishes graded readers on Sherlock Holmes, ranging from Level 1 to Level 3. By scanning and analyzing all of the texts, as we had done in selecting *The Railway Children*, three graded readers on Sherlock Holmes were selected (see below for more details).

The G-group: The study materials for the G-group were *Sherlock Holmes and the Duke's Son* (Bassett, 2008)*, Sherlock Holmes Short Stories* (West, 2000), and *The Last Sherlock Holmes Story* (Kerr, 2008). The titles have 6,101, 6,419, and 10,489 words respectively, and the total word count is 23,009. Other lexical information, such as the percentage (%) and the total words (token, in parentheses) of each word level in each text, is analyzed by BNC/COCA and presented in Table 1.

Table 1. *The text analysis for the graded readers of the Sherlock Holmes stories*

Level	Level 1	Level 2	Level 3	Mean
Book titles	*Sherlock Holmes and the Duke's Son*	*Sherlock Holmes Short Stories*	*The Last Sherlock Holmes Story*	
	% (token)	% (token)	% (token)	% (token)
1000	86.38 (5,270)	87.76 (5,633)	88.30 (9,262)	87.64 (20,167)
2000	2.84 (173)	4.14 (266)	5.99 (628)	4.64 (1,076)
3000	3.31 (202)	1.04 (67)	0.94 (99)	1.60 (368)
Proper Noun	5.15 (314)	4.33 (278)	3.14 (329)	4.00 (921)
Not in the list	1.46 (89)	1.15 (74)	0.82 (86)	1.08 (249)
Total word count	6,101	6,419	10,489	

The T-group: The T-group read three versions of *The Railway Children* published by Penguin (Holmes, 1995), Compass (Methold, 2009), and Oxford Bookworms (Escott, 2000). Each book has 5,016, 8,182, and 9,661 words respectively. The total word count is 22,850. Though the book published by Penguin is classified as Level 2, the vocabulary profile in Table 2 showed that it was easier than the Compass text. In addition, all the three graded readers had been previously read by the researchers and experienced ER students before determining the reading order: Penguin, Compass, and then Oxford. Overall, the characteristics of the three graded readers are as follows: The Penguin reader is the shortest in length, contains the fewest unknown words and the scenario is very easy to comprehend. The Compass reader scenario is similar to the Penguin one but has many more unknown words. Finally, the Oxford Bookworm reader contains many more story details.

Table 2. *Text analysis for The Railway Children published by different publishers*

Level	Level 2	Level 2	Level 3	Mean
Publishers	Penguin	Compass	Oxford Bookworms	
	% (token)	% (token)	% (token)	% (token)
1000	90.38 (4,531)	88.78 (7,264)	89.41 (8,638)	89.40 (20,433)
2000	4.15 (208)	5.32 (435)	4.81 (465)	4.85 (1,108)
3000	0.80 (40)	1.42 (116)	1.16 (112)	1.17 (268)
Proper Noun	3.67 (184)	2.62 (214)	3.03 (293)	3.03 (691)
Not in the list	0.16 (8)	0.35 (29)	0.42 (42)	0.35 (79)
Total word count	5,016	8,182	9,661	22,859

Comparing the frequency of occurrence for 30 key unknown words in both genres, we found that 27 of the 30 words in the Sherlock Holmes stories appear in only one book, and 3 of the 30 words appear in two books *(mystery, violent,* and *fixed*). In *The Railway Children* books, 18 of the 30 words appear in one text, 8 of the 30 words in two texts (*platform, porter, pram, fetch, whisper, maid, mend,* and *petticoat*), and 4 of the 30 words in three texts (*tunnel, wave, signal*, and *coal*). It is apparent that there are many more words reoccurring across different texts in *The Railway Children* than in the Sherlock Holmes stories.

The dependent measures

Two new passages were selected to measure students' reading speeds and comprehension. One was the first two chapters of *Sherlock Holmes and the Sport of Kings* graded reader. The other, *The Railway Children*, was downloaded from Project Gutenberg (https://www.gutenberg.org) and modified by the authors to make the lengths and difficulty of the two texts more comparable and also to fit the criterion of 95% coverage of the first 2,000 words plus proper nouns. As can be seen in Table 3, the length and vocabulary profiles of the two passages were similar, and the text coverage of the first 1,000 words was nearly the same, 87.18% and 87.67% and the token counts of the 1,000 word level were 932 and 903 respectively. It has to be noted that although *Sherlock Holmes and the Sport of Kings* is rated Level 1, its vocabulary level is similar to texts the students had previously read (see Table 1).

Reading rate: To measure students' reading speeds, all students were given a practice test first. An online stopwatch was downloaded and projected onto a big screen for students to time their reading. To balance the test order, each group was split into two subgroups: half the students in each group read the familiar passage, and the other half read the unfamiliar one. All students read at the same time. When they finished reading, each student put up his or her hand, and test papers were given out and reading passages collected at the same time. This meant that they had no opportunities to look for information while they were answering the questions.

Reading comprehension: To measure students' reading comprehension on *The Railway Children*, the test questions included only the information that had not appeared in the books they read. Twenty-five questions were developed for each passage. The question types included multiple-choice items, short answer questions, yes/no, gap-fill, and true/false. The test questions were developed by the second author and revised by the first author after being piloted on four students from a different class, before being administered to the participants.

Table 3. *Text analysis for the two passages used in measuring reading speed and comprehension*

	Sherlock Holmes and the Sport of Kings	*The Railway Children* (Downloaded from Gutenberg, revised)
	% (token)	% (token)
1,000	87.18 (932)	87.67 (903)
2,000	3.18 (34)	4.95 (51)
3,000	1.03 (11)	1.36 (14)
Proper nouns	55.05 (4)	2.43 (25)
Not in the lists	1.22 (13)	1.65 (17)
Total words	1,069	1,030

Perceptions of narrow reading

A short questionnaire containing seven 7-point scale items and one open-ended item was developed by the researchers. The first five items concerned the learners' perceptions on overall reading ease, reading speed, confidence, comprehension, and the interest levels of the scenarios. The students had to select one description that best described their perception from a 7-point

scale (1: *entirely disagree*, 2: *mostly disagree*; 3: *somewhat disagree*, 4: *not sure*; 5: *somewhat agree*; 6: *mostly agree*; 7: *entirely agree*). Item 6 and Item 7 targeted their vocabulary learning. The students not only had to select one response to describe their feelings, but they also had to give some examples to support the response they selected. The last item was an open-ended question. The students could write down anything that they wanted to regarding the treatment. See Appendix A for the short questionnaire.

Procedure

The two groups of participants had no experience of reading independently in L2, nor had they read any graded readers. Before the formal experiment began, the two groups read and listened to three graded readers, one each from Level 1, Level 2, and Level 3. The purpose of this was to have the students gain some reading experience before the actual experiment started. After reading the three practice books, a pretest was given to determine the reading speeds of the two groups and to check unknown words (to explore the participants' word knowledge of the materials that they would read). The G-group then started to read and listen to the three graded readers in the following order: *Sherlock Holmes and the Duke's Son* (Level 1), *Sherlock Holmes Short Stories* (Level 2), and *The Last Sherlock Holmes Story* (Level 3); and the T-group read and listened to *The Railway Children*, in the publisher order of Penguin, Compass, and Oxford Bookworms. It took 3 weeks for the students to complete the three books. There were two reasons why it took three weeks to finish the books. Firstly, the students had had little prior experience of reading stories, so the first researcher had to stop every one or two chapters to ask the students questions to make sure that the students were comprehending the story scenarios. Secondly, the books were all read in class. The students who were late for class or were absent from class during the treatment period were still allowed to the take the tests on reading speed and comprehension, but their data were excluded from the study. The procedure is summarized in Table 4:

Table 4: *Summary of tasks finished in each timeline*

Week	*Tasks*
1–5	This was the warm-up stage. All students read and listened to three graded readers in the following order: *The Elephant Man*, *Grace Darling*, and *Chemical Secret*
6	break
7–9	A pretest on reading speed was administered, and students' knowledge of unknown words was checked. G-group read and listened to three Sherlock Holmes stories. T-group read and listened to three versions of *The Railway Children,* published by three different publishers.
10	Tests on reading speed and comprehension were administered and the questionnaire on the perceptions of narrow reading was completed

Data analysis

The data collected was analyzed with SPSS 23 for Windows. The reading speed was calculated by wmp using the following formula: [(total word counts/total time in seconds) x 60]. The reading comprehension was calculated in percentages (correct items x 4), making it easier for readers to understand. The reliabilities of the two reading tests were also calculated in

Cronbach's alpha. To answer the first and second research questions, paired samples *t* tests were used to compare the differences within groups, and one-way analysis of variance (ANOVA) was used for comparing the differences between groups. The dependent variables were reading speed (wpm) and reading comprehension (in percentage). The independent variable was the reading condition (title and genre). In addition to comparing the *p* values, the effect sizes in eta squared and Cohen's *d* were also calculated to examine whether the *p* values have any practical importance. Multiple *t* tests using a Bonferroni correction were used to compare the differences between groups' perceptions for the third research questions.

Results

Reading rates

To answer the first research question regarding the rates for reading familiar and unfamiliar texts, the differences within each group were first compared and then comparisons were made between groups. For the within group, the T-group read *The Railway Children* at an average speed of 142 wpm and at 126 wpm for *Sherlock Holmes and the Sport of Kings*. A significant difference in speed was found for the T-group reading familiar or unfamiliar texts, t (24) = 3.5, p = .002. The effect size calculated by eta squared was very large (η^2 = .34)[1]. The G-group read *The Railway Children* at a speed of 128 wpm, and 146 wpm for *Sherlock Holmes and the Sport of Kings*. The difference in reading speed for reading familiar versus unfamiliar texts was statistically significantly different, t (27) = -4.83, p =. 001. The effect size (η^2 = .46) was also large.

For the differences between groups, when reading *The Railway Children*, the T-group read significantly faster than the G-group, F(1, 52) = 5.01, p = .030). Cohen's *d* was used to calculate the effect size, and it was large, d = 0.83[2]. A significant difference was also found between the two groups reading the text selected from *Sherlock Holmes and the Sport of Kings*, F (1, 52) = 6.49, p = .014; d = 0.71. The effect size was medium in strength. Overall, the results were found consistent within and between groups—students read faster on the text with which they were familiar.

Table 5. *Mean scores and standard deviation of the reading speeds of the two groups on two reading passages*

Reading texts		T-group (n =25)	G-group (n =28)
The Railway Children	Mean	142 (16.97)	128 (26.84))
	Min-Max	115-186	90-197
Sherlock Holmes and the Sport of Kings	Mean	126 (23.24)	146 (34.46)
	Min-Max	71-163	83-206

Reading comprehension

The second research question examined the reading comprehension levels when reading familiar versus unfamiliar passages. The reliabilities (Cronbach's α) for the two sets of reading tests

[1] Cohen (1988) classified the effect sizes into small, medium, and large by using cut-off points at .01, .06, and .14.
[2] Cohen's *d* is calculated by the standard deviation units. An effect size of 0.2 is small, 0.5 medium, and 0.8 large.

were .85 for *Sherlock Holmes and the Sport of Kings* and .82 for *The Railway Children*. To compare the differences between the two groups, Table 6 shows that the T-group comprehended 76.71% for the passage *The Railway Children*, and 70.56% for the passage *Sherlock Holmes and the Sport of Kings*. The difference was 6.15 percentage points and was statistically significant, t (24) = 2.57, p = .02; the effect size calculated with eta squared was large (η^2 = .22).

The G-group achieved 58.33% for the passage *The Railway Children* and 70.71% for the passage *Sherlock Holmes and the Sport of Kings*. It is apparent that the G-group scored 12 percentage points higher on the familiar text than on the unfamiliar one, and the difference was statistically significant, t (27) = -5.32 p < .001, and the effect size was very large (η^2 = .51).

To compare the differences between the two groups, a one-way ANOVA was conducted. When reading *The Railway Children*, the T-group comprehended 76.71%, whereas the comprehension level for the G-group was only 58.33%. There was a significant difference between the two groups in their comprehension levels, F (1, 52) = 39.09, p < .001, and the effect size calculated with Cohen's d was medium, d = 0.71. When reading *Sherlock Holmes and The Sport of Kings*, the two groups comprehended comparably, 70.56% and 70.71% for the T-group and the G-group respectively, F (1,52) = .002, p = .97. The effect size was marginal, d = 0.01.

Table 6. *Mean scores and standard deviations of the reading comprehension of the two groups on two reading passages*

Reading texts		T-group (n =25)	G-Group (n =28)
The Railway Children	Mean	76.71 (8.89)	58.33 (12.05)
	Min-Max	63–92	38–83
Sherlock Holmes and the Sport of Kings	Mean	70.56 (11.37)	70.71 (14.24)
	Min-Max	44–92	36–92

Student perceptions

Table 7 presents the students' perceptions of narrow reading. The results show that six items in both groups scored 4 or higher on the 7-point scale, which meant that both groups responded positively to narrow reading. Using a Bonferroni adjusted alpha level of 0.025, significant statistical differences were found with items 1, 4 and 6. The T-group perceived that reading became easier (Item 1) and they comprehended better (Item 4) after reading the first book. The group also noticed that there were a number of words repeatedly occurring (Item 6). Item 5 is a reverse item exploring whether students felt bored by the input. The T-group scored an average of 2.76/7, and 3.57/7 for the G-group, which further suggested that both groups did not consider themselves bored when they read the same title three times or read three books of the same genre.

Table 7. *Student perceptions on narrow reading (in %) in T-group (n =25) and G-group (n = 28)*

#		Group	1	2	3	4	5	6	7	Mean (*SD*)	*p*
1	Become easier after the 1st book	T	0	0	12	12	28	44	4	5.16 (1.11)	.004
		G	0	14	21	25	25	7	7	4.11 (1.42)	
2	Read faster after the 1st book	T	0	0	4	28	28	36	4	5.08 (1.00)	.316
		G	0	0	4	32	46	14	4	4.82 (0.86)	
3	Become more confident	T	0	0	16	20	32	28	4	4.84 (1.14)	.172
		G	0	7	7	46	25	7	7	4.39 (1.20)	
4	Comprehend more after the 1st book	T	0	0	4	0	48	40	8	5.48 (0.82)	.002
		G	4	7	11	32	25	14	7	4.39 (1.45)	
5	Books are boring	T	24	12	40	12	12	0	0	2.76 (1.30)	.062
		G	11	18	32	0	29	4	7	3.57 (1.73)	
6	Notice repeated words	T	0	0	0	8	36	32	24	5.72 (0.94)	.000
		G	0	0	7	43	32	11	7	4.68 (1.02)	
7	Notice repeated phrases	T	0	0	0	48	36	8	8	4.76 (0.93)	.077
		G	0	0	21	54	11	7	7	4.25 (1.05)	

Note. 1: *entirely disagree*; 2: *mostly disagree*; 3: *somewhat disagree*; 4: *not sure*; 5: *somewhat agree*; 6: *mostly agree*; 7: *entirely agree*

Discussion

Reading rate

Both the T-group and G-group read much faster when they read related texts, and the reading rates for the two groups were nearly the same. However, when they read unfamiliar or unrelated texts, both groups read at about the same rate as they read the passage in the pretest. Students' higher reading rates for related texts were also consistent with their responses in the questionnaire (see Table 7), in which 68% of the students in the T-group, and 64% in the G-group responded positively that they read faster. Although about one-third of the students in each group answered *not sure*, very few students gave negative responses. The results provided strong evidence that reading related texts increased reading speed more efficiently than reading unrelated texts. The answer to the first question was therefore positive, as both groups read much faster with related texts.

There are a number of variables that may affect reading rates such as reading purpose, text complexity, and text difficulty relative to an individual's reading ability, and in this study the major variable may have been reading purpose. The fact that students would be assessed for their comprehension levels after reading may have substantially affected their reading rates. They may have read much faster if they were reading only for general comprehension. Regardless of this, if we compare the differences in reading rates between related and unrelated texts, we find that the students in the present study read 16–18 wpm faster after the treatment of reading three related texts within a 3-week period. The difference was impressive, indicating that narrow reading is efficient in improving reading rates. In Iwahori's study (2008), her students read 28 books and gained 29 wpm during the 7-week period. The higher gain in the present study could be due to the fact that the texts in the present study were a series of related texts, whereas random texts were used in Iwahori's study.

The reading rates for unfamiliar texts in the two groups were 126 and 128 wpm, which were similar to the rate at which they read the passage in the pretest: 123 and 128 wpm for the T-group and G-group respectively. The significant differences in reading rates for reading related versus unrelated texts suggested that the faster reading speeds for related texts had not yet been transferred to reading unrelated texts during the 3-week period or by reading only three graded readers. To see the transferring effect from familiar to unfamiliar texts takes time because learning is not linear and students may have to read a certain quantity (i.e., 300,000 words, see Nishizawa, Oshioka, & Fukada (2010) for a long-term study) to see its effect. Compared to previous ER studies that looked at both reading rates and comprehension, it was found that most L2 readers read at very slow rates before the treatment, mostly at 100 wpm or below. After the treatment, some read at 120 wpm (Al-Homound & Schmitt, 2009; Bell, 2001; Beglar et al., 2012). Students in the present study, however, read faster than these previous studies after reading three related long texts. The results suggested the efficiency of narrow reading on improving reading rates.

Reading comprehension

Although the variation patterns of reading rates were similar between the T-group and G-group when they read related or unrelated texts, their reading comprehension levels did not seem to change the same way as with their reading rates. If the acceptable level for general reading comprehension in speed reading is 70% (Nation, 2005), then the two groups' comprehension levels on reading related texts could be considered satisfactory, but less so for the G-group, who scored much lower for the unrelated text, at only 58%. The G-group's comprehension level seemed to have suffered when they read *The Railway Children* at 128 wpm. Despite this evidence, it was not easy to determine whether the comprehension levels were satisfactory. The students were aware that they would be tested after reading and were not allowed to refer back to the text they had read. Under these circumstances, it seemed that students were reading for learning, or even for memorization. It was also observed that the students' reading purposes varied—some for rauding, some for learning, and some for memorizing. For example, the first researcher noted that one of the top students in the T-group read very slowly in order to obtain a high mark on the comprehension test. The higher level of comprehension was the goal the student wanted to achieve rather than faster reading speed. Apart from the students' reading purposes, the researchers considered another possible reason not mentioned by the participants: The questions developed for *The Railway Children* contained more details. Inclusion of detailed questions was to ensure that the information mentioned in the post-test had not appeared in the previous three books. However, some questions might have been too detailed to measure reading speed and general comprehension. This might have compromised the comprehension results of the G-group reading the unfamiliar text. On the contrary, it is likely that the comprehension test based on *Sherlock Holmes and the Sport of Kings* contained fewer detailed questions, so test questions were less difficult for the T-group to answer. Despite this possibility, findings related to the second research question confirmed that the reading comprehension levels in both groups were statistically higher when they read familiar texts.

Comparing the two groups' responses to questionnaire Items 1 and 4, we found that the T-group rated at significantly higher levels than the G-group, although both groups' mean scores were on

the positive side. The T-group perceived that reading became easier for them and they comprehended more after reading the first book. Furthermore, the results of questionnaire Item 3 indicated that 64% of the students in the T-group responded that they had become more confident, whereas only 39% in the G-group reported so. The other 46% in the G-group, however, were not sure whether they had become more confident or not. That the T-group scored nearly the same as the G-group when they read the unrelated text (*Sherlock Holmes and the Sport of Kings*) might be due to their reported higher level of confidence. The confidence might have come from repeatedly reading the same title, as repeated reading has been found to be effective in increasing reading speed and comprehension in both the L1 context (Dowhower, 1987) and in the L2 context (Chang & Millett, 2013). Students who had confidence in reading might have found it easier to transfer their reading skills to an unfamiliar text at a comfortable speed and reach a more reasonable comprehension level. Many students in the T-group also commented in the questionnaire that they liked repeatedly reading the same title. One student wrote: "I liked it. Most characters are the same. Many words reoccurred, such as *tunnel, petticoat, wave*, etc." Another student noted: "It was quite interesting. I've never read the same title three times. Each time I gained some different information." Another simply wrote: "Wonderful, I liked it."[3]

Student perceptions of narrow reading

The student perceptions of the two forms of input were positive, but the two groups perceived the input differently on Items 1, 4, and 6. The first item asked whether students felt the reading was easier after reading the first book. To be more specific, the researchers intended to determine whether students could move from Level 1 to Level 2 and then to level 3 more easily because the texts were either of the same genre or the same title. Nearly half (48%) of the students in the T-group mostly or entirely agreed that after reading the first book, reading the second book was easier, and another 28% also somewhat agreed with the statement. More interestingly, the same percentage (48%) of students mostly or entirely agreed that they comprehended more after reading the first book—96% of the responses were on the positive side. Many students commented that reading the same title but at different levels made the learning more gradual because the Penguin reader was very easy, contained only a few unknown words, and the scenario was easy to understand. When they moved to the Compass reader, they felt they had already learned many words, and the Compass reader also bolded the target words, making them stand out. Many more details appeared in the Oxford reader. The first researcher noticed the students' excitement when they gained more details about the story. Some students even made a list of differences among the three books. Item 6 addressed the noticing of repeated words. Students in the T-group could easily give a long list of words that recurred across the three texts, for example, *coal, petticoat, tunnel, platform, porter, pram, station master, engine,* and *wave*. On the contrary, the students in the G-group had to think very hard to recall the repeated words, and most students listed only a few words—*Holmes*, *Watson, crime,* and *murder or murderer.* One student wrote: "Though the three stories were all about Sherlock Holmes, the story scenarios are different; only Sherlock Holmes and Dr. Watson appeared in all the three books." This comment may suggest that G-group students had less similar background knowledge to support their reading even though they were reading texts of the same genre.

[3] First researcher's translation from students' comments in Chinese.

There was no significant difference between the two groups for Items 2, 3, 5, and 7. Item 2 addressed reading speed. The mean scores of the two groups' perceptions were 5.08 and 4.82 out of 7 for the T- and G-groups respectively. Both were on the positive side. Their perceptions were consistent with their reading rates of reading related texts. Item 3 explored whether they became more confident after reading the first related text. Both groups responded positively and no significant difference was found. However, a large proportion (64%) of the T-group students selected *agree*, while nearly half (46%) of the G-group students chose *not sure*.

Item 5 concerned whether the *books* were boring. Students in both groups disagreed with the statement. The most likely reason that students considered the input interesting was that they had had little previous experience in learning English through stories. Before the treatment, all their reading experience was form-focused instruction. Finally, Item 7 required students to state whether they encountered many repeated phrases in the texts and to list them. Approximately half of the students in both groups responded *not sure*. Most students could not remember any phrases that occurred repeatedly. The answer to the third research question was that both groups found the input interesting and perceived improvement in their reading speed, but only the T-group perceived improvement in comprehension level and noticed repeated vocabulary items.

Conclusion

This study explored the reading fluency and perceptions of two groups of EFL students, each group reading either three same-title or three same-genre graded readers. The same-title graded readers were written at different levels and while they contained the same scenario, the details of the story scenario and the difficulty of language increased and this helped students to perceive that they comprehended better and noticed more recurring vocabulary words in the texts. The same-genre group, however, had to use different background knowledge because there were fewer similarities among the three different stories. Although there were some differences in text organization, both groups showed that they read faster with related texts than with unrelated ones. These results may have some important pedagogical implications in teaching beginner readers to develop L2 reading fluency:

a. Choosing texts that are related to each other enables L2 learners to read faster. Earlier corpus-driven studies have shown that reading related stories lowers the lexical load for L2 learners, which enables them to comprehend better. This empirical study has provided further evidence that L2 learners are able to read faster and enjoy reading more with related texts. Given these results, selecting related materials that can facilitate students' learning is an important task for L2 teachers. If extensive reading is also a part of the curriculum, L2 teachers can guide students, in particular beginner learners (See McQuillan & Tse, 1998) to choose same-series graded readers written by the same author or in the same genre. The availability of using same-title readers written at different language levels may be limited to the classic readers.

b. Narrow reading enables students to move faster from a lower level to a higher level. A recent study by Webb and Chang (2015) showed that lower level students may have to read many lower level texts before they move to the higher levels. The students in this study seemed to

move easily from lower levels to higher levels through narrow reading.

Some suggestions for future research are made before the end of this conclusion. First, the study had only one trial and the participants' positive feedback on the input might be due to the novelty of the learning method. Future studies may repeat the experiment a few times to examine whether students' perceptions remain positive. Second, though the T-group noticed a number of repeated words, the study did not look at vocabulary gains. Future studies may include this aspect to shed more light on this under-researched area. Third, the study did not include delayed posttests, which might show if retention rates are affected after a period of time without input. The present study was conducted as part of the English curriculum, which meant that the students had to continue reading. Therefore, it was not possible to implement delayed posttesting. In future studies, it may be possible to schedule the treatment so that a posttest and a delayed posttest are conducted prior to and after a break or holiday. By doing so, we may be able to see the extent to which reading rates are maintained.

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Appendix A

The Short Questionnaire

Please answer each question by giving a number (1–7) in front of the box. The first one has been done for you.

		 1 Entirely disagree 2 Mostly disagree 3 Somewhat disagree 4 Not sure 5 Somewhat agree 6 Mostly agree 7 Entirely agree
Example	4	The three books were written by the same author.
1		After reading the first one, I found it got easier when I read the second one and the third one.
2		I felt that I read faster after reading the first book.
3		After reading the first book, I became more confident when reading the second and third books.
4		I felt that I comprehended more after reading the first book.
5		*The three books were boring.
6		I noticed that some words had been used repeatedly. For example:
7		I noticed the authors used similar phrases repeatedly. For example:

8. Please write down any other comments or feelings you have for the books you studied. Your comments are valuable and important. Please write as much as you can.

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