

Research Article

Word Recognition and Fluency Activities' Effects on Reading Comprehension: An Iranian EFL Learners' Experience

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Reading fluently is the goal of many L2 learners. The purpose of this study was to see how word recognition and fluency-building activities affect Iranian EFL students' reading comprehension. To do so, 93 subjects with preintermediate command of English were selected. Then, they were divided into two experimental groups and one control group, each with 31 participants. In an eight-session period, the first experimental group (word recognition group) received word and phrase recognition activities, the second treatment group (fluency group) was exposed to fluency-oriented activities, while the control group was only exposed to the Farsi translation of the assigned texts. Using a randomized pretest-posttest comparison group design, we attempted to see how reading comprehension changes in response to the treatment. Therefore, a one-way between-groups ANOVA was used to test the null hypothesis. The findings revealed that both experimental groups significantly outperformed the control group in the posttest. There was no significant difference between the two experimental groups, according to post-hoc analyses, hence the efficacy of the two implemented techniques. This study implies that material developers should include such activities in their textbooks to enhance text comprehension, especially at the preintermediate level of language proficiency. Additionally, teachers can employ these techniques in their classes with their learners at the preintermediate level.

1. Introduction

The importance of reading comprehension in academic success cannot be overlooked. Learning to read has a profound impact on people's lives [1, 2]. Reading is the key to the acquisition of knowledge or success in the workplace [2, 3]. Reading comprehension, according to Seymour [4], is the ability to process information from texts to derive

meaning. Woolley [5] describes reading comprehension as a cognitive process of extracting meaning from texts, and it is heavily reliant on the capacity of the reader to read written texts accurately and fluently.

Reading comprehension is a complicated construct involving many components, one being word recognition [6–8]. It is generally agreed upon that reading comprehension is enhanced if readers can rapidly recognize and

retrieve words (e.g., [7, 9]). Word recognition is critical for reading comprehension since students must accurately read the majority of the words in a text to understand what they read. Vocabulary refers to the speech or writing units required to communicate a message in both written and spoken form [10–12]. Vocabulary is taught to enhance learners' deep reading comprehension [13].

Impairments in either word recognition or linguistic comprehension, which includes vocabulary knowledge, might disrupt reading comprehension. Thus, the significance of vocabulary in text comprehension is self-evident: to grasp a passage, the reader must comprehend the majority, if not all, of the words [14–16]. It is for this reason that vocabularies must be taught in second/foreign language classrooms.

There is a lot of evidence to support the assumption that vocabulary knowledge is particularly important for reading comprehension [17–19]. The Lexical Quality Hypothesis emphasizes the importance of knowledge of words claiming that word representation quality influences reading comprehension [19]. Furthermore, the Reading Systems Framework [20, 21], which aims to embody the complexity of reading comprehension in a single theory, highlights the role of the lexicon as a link for both word identification and conceptual understanding.

Another construct that is highly correlated with successful reading comprehension is reading fluency [22–24]. Reading fluency is often characterized as the ability to read with accuracy, speed, and expression [25, 26]. Reading fluency aids learners in keeping track of what they are reading and their grasping of the text [27]. The reader's fluency develops quickly when they are familiar with the bulk of words in a passage [19, 28], and when their decoding skills are automatic and require fewer attention resources [19, 29, 30]. As reading becomes more fluent, fewer cognitive processors are dedicated to decoding and more are freed up to comprehend the meaning of a passage [19, 31].

English is regarded as an important lingua franca in today's world [32]. In Iran, English education begins in junior high schools (Grade 7) and lasts two or three hours per week to provide students with a general understanding of the language [33, 34]. Despite government efforts, Iranians' general language ability and particularly their reading skill are woefully inadequate [35, 36]. Accordingly, Iranians' text comprehension skills require improvement.

As English instructors, we commonly notice that our learners' comprehension skills are not as anticipated, and they routinely perform poorly in class-based examinations. Moreover, these students must take a university entrance exam after graduating from senior high school if they intend to continue their studies. The exam requires students to know English. These pupils, on the other hand, perform so poorly on the English portion of the exam, with reading comprehension being a major component [37, 38]. One cause for this poor performance can be linked back to the limited English time allotted in Iranian high schools' fixed curriculum.

As stated above, poor comprehension skills among Iranian learners require planned and focused instruction. Two techniques that are effective in enhancing

comprehension levels, namely, word recognition exercises as well as reading fluency activities, have been selected as the constructs of this research.

As a consequence, considering the significance of English text comprehension, particularly in the so-called high-stakes test, the current experiment is a deliberate attempt to study the effects of word recognition activities, as well as reading fluency training on reading comprehension among Iranian learners, and to see if these strategies can help to improve reading comprehension. It is hoped that this current research adds to the literature and finds a practical solution for these learners' poor text comprehension.

2. Literature Review

2.1. Theoretical Background. Reading is regarded as a step-by-step process promoting the development of higher-order thinking abilities [9, 39]. Decoding, comprehending, analyzing, and integrating the full concept of a passage are the main parts of reading [40, 41]. Some experts believe that children and teenagers perform better in reading when they have a broad prior knowledge and word range domain [42–44].

According to a majority of L2 acquisition studies, optimal L2 text comprehension is dependent not only on vocabulary size but also on L2 vocabulary access rate, and L2 learners should devote significant time to improving their fluency [45–48]. However, a common finding in research across grade levels is that a large proportion of those struggling with comprehending issues have decoding skills that are below average [49–51]. Insufficient word identification skills are thus the main source of reading comprehension problems for many learners [52–54]. Word identification may be considered the initial barrier to comprehension, and word reading should play a significant part in text interpretation until a sufficient level of word reading proficiency is reached [55, 56].

Reading comprehension is defined by Granda and Ramirez-Avila [57] as the act of processing and interpreting a text. It enables readers to understand content by making connections between their past knowledge and the content that appeared in the text being read. Repeated reading, timed reading, and rate-building reading are all activities that enhance reading comprehension and fluency [58, 59].

In reading studies, reading fluency has been cultivated in several forms. Extensive reading has proven to be a successful approach, as it increases the reading rate and comprehension as a result of spending a significant amount of time on task and processing a large number of words [60, 61]. Reading for enjoyment helps students not only read faster but also develop a long-term reading habit. Repeated reading is another effective strategy to improve reading speed. During one session, participants read the same paragraph numerous times to improve automaticity in word recognition. During the technique, recorded audio support of the reading portions is sometimes used [62–64]. However, the task's repetitive nature can have a negative impact on motivation, and rate gains do not always transfer to other texts unless there is a lot of word overlap between them.

Finally, timed or speed reading can help learners enhance their fluency. Learners read under time constraints to improve their reading pace and beat prior personal records. This strategy has been proven to work as well. In a variety of circumstances, it has been demonstrated to help enhance performance speeds [65–67].

2.2. Empirical Background. The effects of the aforementioned tactics on the comprehension of texts have been researched by a vast number of scholars. For instance, a meta-analysis was carried out by Dong et al. [68] to uncover the relationship between word knowledge and text comprehension. The findings revealed that knowledge of vocabulary accounted for a significant percentage of the variance in text comprehension, and this may also support the independent hypothesis of vocabulary knowledge's effect on comprehension skills. The results of this correlational research indicated that not only did knowledge of words result in enhanced text understanding, but also the coordinated word knowledge development, grammatical knowledge, and inference would result in better performance on complex comprehension tasks.

To test the impact of decoding on speed and comprehension, Tan et al. [69] used a flashcard exercise to teach decoding. Their training led to improvements in decoding speed, reading isolated words, and comprehension, but the latter did not last. Since just three adult learners were included, the findings were severely constrained.

In another study, Akamatsu [70] conducted an empirical research to improve L2 learners' word recognition speed. 46 Japanese university students participated in the program, all of whom had at least six years of prior English instruction. In seven weekly sessions, these learners were taught to identify 150 English vocabularies quickly. The students took a computer-controlled word recognition test before and after training. The training set included 50 nonwords, 50 high-frequency words, and 50 low-frequency words for the exam. From pretest to posttest, both the frequency and reaction time for accurate trials improved dramatically.

Vocabulary influences not only comprehension skills but also other crucial reading skills, including reading efficiency [22, 54]. Dixon et al. [71] calculated the effect of vocabulary on reading speed and discovered a standardized path coefficient of .40, indicating that vocabulary has a significant influence on reading efficiency. Tobia and Marzocchi [72] discovered that knowledge of vocabulary is strongly related to reading fluency in a separate causal model. The same was also found by Rose and Rouhani [73].

In addition to what went before, Karageorgos et al. [74] looked into the effect of accuracy in word recognition on the speed of word recognition and comprehension of texts in elementary school. The accuracy and speed of word recognition were tested at the end of Grades 1–4 while text comprehension was tested at the end of Grades 2–4. On the whole, they discovered that, in German elementary school children, the accuracy of word recognition is the cornerstone for the increase of word recognition speed and text comprehension.

Anderson [75–77] has also suggested a rate-building technique to enhance reading fluency. The readers are given 60 seconds to read as much information as possible in this technique. They are then given an additional sixty seconds to begin reading again from the beginning of the text. The goal of this practice is for learners to swiftly reread old material before moving on to new stuff. Students learn how to process old content more quickly when their eyes move fast over it; the exercise does not emphasize moving the eyes quickly; rather, the material is to be processed and assimilated more efficiently. Learners discover that they can raise their reading rate by participating in this rate-building practice [77, 78].

In the past twenty years, a few passage rereading fluency trials have shown increases in the fluency of reading and, in some cases, understanding. Gorsuch and Taguchi [79] found that a scheme of repeated silent reading practice improves both reading rate and comprehension. Jeon [80] taught oral passage rereading to Korean secondary-level EFL students and found that they improved their reading pace and truly appreciated the extended oral rereading experience.

Additional research into reading fluency indicated that, as compared to repeated oral reading, a timed reading treatment was more effective in creating quicker reading speeds [81]. This study lasted 13 weeks and had 35 adult students who ranged in proficiency from low to intermediate (self-reported TOEIC 450 to 550). The timed readings were done using Reading for Speed and Fluency 2 and 3 [82, 83]. After reading 52 passages quietly, the timed reading group improved by about 50 words per minute. The study, however, had no control group against which the results of the two treatment groups could be contrasted.

In another study, Ribeiro et al. [84] also looked into the effects of word recognition, fluency, vocabulary, working memory, and verbal and nonverbal reasoning on reading comprehension. They came to an understanding that all the variables under investigation were related to comprehension skills. Additionally, it was revealed that fluency was the best criterion for assessing comprehension, whereas reading comprehension was unaffected by reasoning. The necessity of improving the mastery of correct and fluent reading in the lower grades was underscored by these findings.

Multiple use of repeated reading methods produce statistically significant effects according to meta-analytic research [85]. On rehearsed passages, these benefits included greater student reading fluency ($d=0.83$) and comprehension ($d=0.67$) [86]. More crucially, repeated reading improved fluency ($d=0.50$) and comprehension ($d=0.25$) when reading novel passages [86, 87]. These findings imply that repeated reading is a successful intervention for all students in kindergarten through fourth grade, as well as for struggling readers in high school [88]. There is additional evidence that the intervention is particularly beneficial for pupils who have difficulty in reading.

In another study, Shimono [89] looked into the effects of repeated oral reading and timed reading on Japanese university students' oral L2 fluency in a separate study. By the end of the treatment, between-participants tests disclosed that the experimental subjects outperformed the comparison subjects. These findings demonstrate the efficacy of frequent

reading aloud and sequential reading on the growth of L2 reading fluency.

Although the above-stated studies point directly to the effectiveness of word recognition activities and fluency training on enhancing both L1 and L2 learners' comprehension skills, Alvarez-Canizo et al. [90] believe that, to gain reading comprehension, it is by no means enough to have strong reading fluency. Additionally, according to Deeney [91], if a substantial proportion of the keywords in the text are misread, text comprehension will be impaired. Furthermore, to the best of what the researchers know, there is scant research on the effects of word recognition activities and fluency training on reading comprehension in an Iranian context. Therefore, considering the promising effects of previous studies on the impacts of word recognition activities and fluency training on text comprehension, the researchers are hopeful of finding a panacea for the development of Iranian learners' English reading comprehension, which, according to Fazilatfar and Kargar Behbahani [33], is far from satisfactory. Accordingly, the following research question was attempted to be answered in this study.

2.2.1. Research Question. Is there any significant difference in text comprehension between learners receiving word recognition activities and fluency training and learners who do not receive such instruction?

The following null hypothesis was developed in this study based on the above-stated question.

2.2.2. Null Hypothesis. There is no significant difference in text comprehension between learners receiving word recognition activities and fluency training and learners who do not receive such instruction.

3. Method

3.1. Design. In this study, a control group and two experimental groups with the same number of participants in each group were selected at random from the target participants. Therefore, the design of the current study is a randomized pretest-posttest design.

3.2. Participants. The researchers recruited students who had studied English for five to eight semesters to voluntarily engage in the research by sending an announcement to several foreign language schools in Khuzestan, Iran. Those who volunteered (a total of 193 English learners aged between 18 and 25 years) were guaranteed free training. Oxford Quick Placement Test (OQPT) showed that 93 subjects were chosen from among 193 Iranian students for this study. The participants all had a lower-intermediate level of English and they all spoke Persian as their first language.

3.3. Instruments. The OQPT was the first instrument employed in this investigation. The purpose of this test was to homogenize the subjects. It let the researchers better determine the proficiency level of their subjects. According

to the results obtained from the test, 93 subjects with scores ranging from 28 to 33 were designated as lower-intermediate students and selected for the study.

A reading comprehension pretest was the second tool employed in this investigation. A pretest developed by the researcher based on the students' coursebook (American English File 1) was the second instrument in this investigation. It had 15 objective-based questions. A panel of English experts certified the validity of the pretest, and its reliability was calculated using Cronbach's alpha ($r = .86$). The researchers used another similar group to pilot the pretest to ensure that the test would be feasible for the target participants.

A reading comprehension immediate posttest was used as the study's third instrument. The immediate posttest was an altered form of the pretest, but with a subtle difference: the sequence of options and questions was switched to prevent students from remembering pretest responses.

3.4. Data Collection and Treatment. After homogenizing the subjects, they were pretested to ensure their comprehension level. Then, the participants in the experimental groups received the treatment. The reading passages of American English File 1 were taught to the experimental subjects using both word recognition activities and fluency training.

During the treatment, the subjects of the first experimental group were exposed to timed word and phrase recognition exercises. In this timed activity proposed by Folse [92], the experimental individuals were given vocabulary exercises based on the materials they had to read. Another implemented strategy for this group was a timed semantic-connection exercise, which was designed to provide students practice with quick lexical access to words they previously knew. Students considered the main word and many options under timed constraints and chose the one word (or phrase) that (1) shared a connection with the main word, (2) was synonymous with it, or (3) had a go-togetherness with it. Furthermore, rate build-up reading was implemented for the second experimental group to enhance reading fluency. Students were given 60 seconds to read as much material as they could in this task. They were instructed to illustrate an * in the text where they completed their reading after the first minute. They were then given an additional 60 seconds to read the text again from the beginning. During the second 60-second phase, participants had to read more content than they did during the first. They were asked to indicate another * in the text when they were stopped after the second time through the same content. The drill was done three times more. The goal of this activity was to swiftly reread previous content before moving on to new stuff. The activity of repeated reading was also used to improve reading fluency. In terms of purpose, this activity is identical to rate build-up reading, but not in terms of execution. Students read a brief passage repeatedly until they reached threshold reading rate and comprehension levels. The goal was to reach the criteria level of 200 words per minute with 70% comprehension. In

TABLE 1: Descriptive statistics of all groups on the pre- and posttests.

		N	Mean	Std. deviation	Std. error	95% confidence interval for mean		Minimum	Maximum
						Lower bound	Upper bound		
						Pretest	Word recognition		
	Fluency	31	4.6452	2.70245	.48537	3.6539	5.6364	1.00	14.00
	Control	31	4.1935	2.35824	.42355	3.3285	5.0586	1.00	13.00
	Total	93	4.4194	2.52949	.26230	3.8984	4.9403	1.00	14.00
Posttest	Word recognition	31	9.7742	3.57500	.64209	8.4629	11.0855	5.00	19.00
	Fluency	31	8.7742	3.63969	.65371	7.4391	10.1092	3.00	20.00
	Control	31	5.6774	2.84473	.51093	4.6340	6.7209	2.00	17.00
	Total	93	8.0753	3.76839	.39076	7.2992	8.8514	2.00	20.00

TABLE 2: Inferential statistics of all groups on the pre- and posttests.

		Sum of squares	Df	Mean square	F	Sig.
Pretest	Between groups	3.161	2	1.581	.243	.785
	Within groups	585.484	90	6.505		
	Total	588.645	92			
Posttest	Between groups	282.860	2	141.430	12.435	.000
	Within groups	1023.613	90	11.373		
	Total	1306.473	92			

addition, one more technique named “beat the clock time” was also employed during the fluency-building phase. During this technique, students had to read a part of a text, for example, in 30 seconds, and using an asterisk, they indicated how much of the passage was read. Then and only then, they were given an additional 30 seconds to reread the same passage. It is supposed that if during the second, third, fourth, etc. times students can read more words with comprehension, their fluency, reading rate, and comprehension improve. Just like the previous activity, the objective was to reach the criteria level of 200 words per minute with 70% comprehension. It must also be taken into account that the control group received none of the strategies mentioned above. Only the original text and its Farsi translation were shown to them. The entire course lasted eight sessions. Following the completion of the treatment, a posttest was administered to all the groups to determine the efficacy of the treatment.

3.5. Data Analysis. To analyze the gathered data, the researchers used SPSS. First, we got sure that the data were normal by checking them using the Kolmogorov-Smirnov (K-S) test. Then, the effects of the treatment on reading comprehension were measured using a one-way between-groups ANOVA. Finally, post-hoc analyses were conducted to determine which strategy was more effective in improving reading comprehension.

4. Results

4.1. The Data Were Analyzed in the Following Tables. Table 1 shows the mean score (M) as well as the standard deviation (SD) of each group at both pretest and posttest. According to this table, at the pretest, M and SD for the word recognition group are 4.419 and 2.57, respectively, while for

the fluency group they are 4.645 and 2.702, and for the control group, they are 4.193 and 2.358. The table further shows that, at the posttest, M and SD for the word recognition group are 9.774 and 3.575, respectively, while for the fluency group they are 8.874 and 3.639, and for the control group, they are 5.677 and 2.844.

Table 2 indicates that in the pretest the difference between the groups was not statistically significant, $F_{2,90} = .243$, $p = 0.785$. The above table further shows that in the posttest the difference between the groups is significantly large, $F_{2,90} = 12.435$, $p = 0.0001$. The experimental group performed better than the control group in the posttests.

Table 3 reveals that in the pretest all three groups performed exactly the same as the sig. value is well above 0.05. Notwithstanding, at the posttest, both the word recognition and fluency group outperformed the control group ($p = 0.001$) with a large effect size (eta-squared value = 0.216), while no significant difference was found between the two treatment groups ($p > 0.001$).

To summarize, a one-way between-groups analysis of variance was performed to find out the efficacy of word recognition strategies and fluency-oriented activities on reading comprehension. At the $p < 0.05$ level, there was a significant difference in reading gains between the experimental subjects and the participants in the control group. The eta-squared effect size for the posttest was 0.216 indicating a large effect. Post-hoc Bonferroni adjustments revealed that the mean score of the word recognition group ($M = 9.774$, $SD = 3.575$) differed significantly from the control group in the posttest ($M = 5.677$, $SD = 2.844$). The mean scores of the fluency group ($M = 8.774$, $SD = 3.639$) and the control group ($M = 5.677$, $SD = 2.844$) were also different from each other. Nevertheless, in the posttest, there was no significant variability in mean scores between the word recognition and fluency groups ($p > 0.05$).

TABLE 3: Comparing the posttests of all groups.

Dependent variable	(I) group	(J) group	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
Pretest	Word recognition	Fluency	-.22581	.64784	1.000	-1.8063	1.3546
		Control	.22581	.64784	1.000	-1.3546	1.8063
	Fluency	Word recognition	.22581	.64784	1.000	-1.3546	1.8063
		Control	.45161	.64784	1.000	-1.1288	2.0321
	Control	Word recognition	-.22581	.64784	1.000	-1.8063	1.3546
		Fluency	-.45161	.64784	1.000	-2.0321	1.1288
Posttest	Word recognition	Fluency	1.00000	.85661	.738	-1.0897	3.0897
		Control	4.09677*	.85661	.000	2.0070	6.1865
	Fluency	Word recognition	-1.00000	.85661	.738	-3.0897	1.0897
		Control	3.09677*	.85661	.001	1.0070	5.1865
	Control	Word recognition	-4.09677*	.85661	.000	-6.1865	-2.0070
		Fluency	-3.09677*	.85661	.001	-5.1865	-1.0070

* The mean difference is significant at the 0.05 level.

5. Discussion and Conclusion

Based on the findings of this research, the research question “Is there any significant difference in text comprehension between learners receiving word recognition activities and fluency training and those who do not?” is answered in this section. To determine the effectiveness of the treatment on the students’ reading comprehension, the researchers used an ANOVA. The outcomes disclosed that students who participated in word recognition activities and fluency training performed better than those who did not ($p < 0.05$). As a result, the study’s null hypothesis was rejected.

The data suggest that word recognition activities and fluency training improved the reading comprehension of Iranian EFL students. This is consistent with a significant body of research that has found that word recognition and fluency training improve reading comprehension (e.g., [9, 54, 58, 68, 74, 84, 89, 90, 93–98]). However, Ribeiro et al. (2016) had argued that reading fluency is the strongest predictor of reading comprehension, but this experiment provided evidence that fluency in reading is by no means a better practice than word recognition activities, at least at the preintermediate level of language proficiency.

Successful L2 comprehension depends on both large vocabulary size and rapid vocabulary access; accordingly, L2 learners need to allocate a significant portion of their learning time to enhance their reading fluency [45–48]. Because insufficient decoding skills hinder comprehension among a majority of L2 learners [54], the results obtained from this investigation can be regarded as a practical solution. That is to say, training in both word identification skills and fluency-oriented activities can really improve text comprehension among EFL learners.

Subjects who experienced word identification training, as well as fluency-informed activities, outperformed those learners who did not experience such instruction. This itself can point to the efficacy of the treatment on text comprehension among Iranian EFL learners at least at the preintermediate level.

According to Anderson [99], the acquisition of word-decoding skills is the first step toward fluency. Lack of decoding abilities is a contributing cause to poor reading fluency for struggling intermediate-level readers. L2 readers with good bottom-up reading skills can incorporate top-down reading skills (i.e., generating meaning by making predictions or inferences and employing background information to understand a passage) into text comprehension. Readers can then read at a comfortable pace while maintaining enough understanding.

Before conducting the study, the participants had poor decoding skills which was also a barrier to their reading fluency and accordingly their text comprehension. But, after the treatment, subjects in the experimental group gained some knowledge. That is to say, the instruction was effective. To put it in other words, instruction in both decoding skills and rate-building activities enhanced text comprehension among experimental subjects. This finding is in line with the theoretical foundation underpinning this study [19, 27, 29, 30, 45–48], 100).

This study shows that training in word recognition activities enhances the reading rate and comprehension as well. Furthermore, the findings of this study highlight the importance of bottom-up skills as well as fluency-informed activities in EFL reading classrooms in enhancing text comprehension. It is also important to encourage learners to do extracurricular exercises to boost their bottom-up skills and reading fluency because without having adequate word recognition skills and fluency, their comprehension remains inadequate. Thus, decoding and fluency are both strongly related to text comprehension.

Although this research found strong evidence supporting the effectiveness of strong word recognition skills and fluency training, they are neglected in reading classes [99]. Fluency is crucial for performance since it depends on and typically demonstrates understanding, even though it is not always enough to ensure excessive levels of reading comprehension achievement. This is demonstrated by very strong studies and theoretical underpinnings. According

to Pikulski and Chard [102], fluency serves as a link between reading comprehension and accurate word recognition. Fluency is emphasized by Ming and Dukes [103] as a crucial component of thorough reading in an inclusive classroom.

Because vocabulary acquisition is so important for reading comprehension, intensive vocabulary education is necessary for readers of all levels of skill, but especially intermediate learners [99]. Explicit vocabulary education is one technique to assist learners to get out of the intermediate-level rut. According to Folse [104], the best source of input for vocabulary learning in a language classroom may be the teachers. A quick word recognition exercise is one activity that can be utilized to assist learners to promote their word knowledge and automaticity in word recognition [99].

The use of word recognition activities and fluency training in the academic field of foreign language learning, particularly vocabulary development, has numerous advantages. Learners can acquire more words while feeling more confident by employing these activities. This study suggests that English learners should employ these tactics consciously to regulate their performance and learning.

The current study's findings would urge teachers to teach their students using the aforementioned activities, as this kind of instruction is beneficial. L2 educators, researchers, and curriculum developers will be able to get insight into how to use these activities to aid in teaching English language vocabularies by utilizing the knowledge gained from this study. Additionally, given the corroborated efficacy of these two techniques in enhancing learners' text comprehension, language academies are advised to encourage their teaching staff to employ the techniques in their classrooms.

Although it is widely acknowledged that knowledge of words is linked to reading abilities (e.g., [47, 105]), Grabe and Stoller [106] claim that most reading textbooks do not incorporate word or phrase recognition exercises. Therefore, it is recommended that even if such activities do not appear in the textbooks, teachers, through instructor-made activities, provide and expose their learners to them so that their text comprehension improves.

To summarize, this study's findings showed that word recognition and fluency-oriented activities improve comprehension skills. The results demonstrated that, due in part to the abovementioned activities, the instruction groups did better on the posttest. Learning through word recognition and fluency-oriented exercises, based on the findings, provides learners with a greater possibility to remember an acceptable amount of knowledge learned from teaching. Additionally, these exercises contribute to comprehension skills.

6. Implications, Limitations, And Suggestions for Further Research

This study established the efficacy of word identification skills as well as reading fluency training in enhancing text comprehension among Iranian EFL learners. Therefore, the pedagogical implication of this study is that language teachers, especially those working with learners of low

language proficiency levels, can employ these techniques in their classes should they wish to promote their learners' reading comprehension.

The second implication of this study is for learners. If learners have poor bottom-up skills, their comprehension is poor as well. These learners are advised to do extracurricular word-identification exercises. Additionally, when they are reading extensively, they can employ reading fluency activities such as "rate build-up" and "beat the clock" activities to enhance their reading rate. Another implication of the study directly relevant to curriculum developers, policy-makers, and syllabus designers is that these stakeholders are advised to use the findings of this research so that their target learners' text understanding improves.

The study, however, suffers from some limitations. The first limitation is that only 31 subjects were involved in each group. Another limitation is that the researchers only focused on one specific level of language proficiency. A third limitation is that this experiment was done in a specific geographical location; therefore, the results could not be easily extrapolated to other contexts. There are also some recommendations for further research. The first suggestion for future studies is to involve more people to obtain more understandable results. Another piece of advice for research is to focus on different levels of language ability. A third suggestion is that comparable research must be conducted in different geographical locations in the future. Finally, future studies should look into the effects of the word and phrase recognition exercises, as well as fluency training, on other language skills and subskills.

Data Availability

The data that support the findings of this study can be obtained from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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