

The Impact of Extensive Reading through Sustained Silent Reading on Iranian EFL Learners' Reading Comprehension and Vocabulary Repertoire

Seyed Abbas Masoumi *

English Language Teaching, Faculty of Humanities, Sarab Branch, Islamic Azad University, Sarab, Iran

Hossein Sadeghoghli

Department of English Language Teaching, Sarab Branch, Islamic Azad University, Sarab, Iran

Abstract

Reading is the most important activity in any language class (Rivers, 1981). Meanwhile, almost all second language reading researchers agree that vocabulary development is an important component of reading comprehension (Grabe, 1997). That is why, in many EFL contexts, educational policy makers have decided to give priority to reading skill and vocabulary knowledge in their programs. In Iran, too, reading comprehension as well as vocabulary is an established requirement for all university students. In fact, one of the main objectives of teaching English at the university level in Iran is to enable students to get information from the original sources in their major fields of study. Nevertheless, finding the best way of improving reading comprehension abilities and vocabulary knowledge is a common objective in majority of EFL studies. To this end, the present study was an attempt to investigate the impact of extensive reading through sustained silent reading (SSR) on improving Iranian learners' reading comprehension and vocabulary repertoire. Sixty students from Islamic Azad University of Rasht were selected from 88 students through CELT to determine their homogeneity. The participants were then randomly divided into two groups, each with 30 subjects. As the second step, a reading comprehension test and a vocabulary test were administrated to the control and experimental groups as the pre-test. The students in the control group received a placebo, whereas the participants in the experimental group were instructed to use sustained silent reading technique. The treatment lasted for 24 sessions. At the end of the treatment, a reading comprehension test and a vocabulary test were administrated to both groups for the purpose of the study. A ttest and a two-way ANOVA were used to analyze the data.

Keywords: extensive reading, sustained silent reading, vocabulary repertoire

INTRODUCTION

The division of language skills into speaking, listening, reading and writing has been known for centuries. What has been changing throughout centuries, however, was the emphasis on particular language skill in a particular period. During the middle Ages, for example, speaking was of paramount importance, as monks needed to have a good command of spoken language, Latin at that time, to conduct masses. After the classical period, Renaissance, the main focus of foreign language learning was on grammar. With the development of printing in the middle of the 15th century and the dissemination of books on which both teachers and students had to rely, the need to develop reading and writing skills came to light. Though throughout the centuries a lot of emphasis was put on the development of reading skills in schools, nowadays it is unfortunately neglected, which leads to hindering the development of other language skills, writing particularly. But also a learner's vocabulary suffers, as well as the ease of constructing complicated sentences. Reading exercises were practiced already in the middle Ages. At that time teachers concentrated on intensive reading, as opposed to extensive reading, which has been trained from the nineteenth century.

Palmer (1964) was probably the first person to distinguish, between the two types of reading: Reading may be intensive or extensive. In the first, each sentence is subjected to a careful scrutiny. In the latter, book after book will be read through without giving more than a superficial and passing attention to the lexical units of which it is composed (Palmer, 1964, P.131) Intensive reading derived from praelectio, the classical exercise of parsing all the words in a sentence and translating them. The technique was applied in the Grammar-Translation Method, which was mainly based on praelectio. Such a deep grammatical insight into the constituents of a text began to be criticized only at the end of the eighteenth century "as a danger to English because it encourages the misuse of words and idioms and fosters the habit of writing nonsense " (Rouse, 1908). With the advent of the Direct Method extensive reading took the place of the disapproved intensive type. Extensive reading does not imply translation and focuses on ideas rather than on grammar. Moreover, reading behavior to be developed is to be an approximation of the reading behavior of a native speaker - foreign words should be immediately matched with their denotation without prior translation into the learner's native language. The majority of the activities involved in reading are based on the extensive reading model, some of them being: reading to gain an overall impression of a text, to find information on a topic in question, to answer questions concerning a text, to comprehend denotations, as well as connotations of words constituting a text, and to expand upon information previously supplied.

Statement of the problem

This research was an attempt to examine the impact of the extensive reading through sustained silent reading on Iranian EFL learners ' reading comprehension ability and vocabulary repertoire. The intended question in this research was based on the belief that sustained silent reading offers students the opportunity independently to explore and practice their reading skills in a regular, pleasurable, stress free manner and to improve reading comprehension and vocabulary knowledge, It also offers adults the opportunity to model reading as a valued activity, important to every discipline and content area. So, the major concern of the researcher was to provide appropriate techniques to expand the students ' reading comprehension ability and knowledge of vocabulary that is necessary for improving reading skills of EFL learners. Sustained silent reading may be one of the useful techniques to achieve this goal.

Significance of the study

Most scholars agreed that reading is one of the most important skills for educational and professional success. Since the finding of the rapid explosion in the world of science and technology is often communicated in the English language, reading in English has received priority among other objectives of English language teaching. That is why the main goal of teaching English in many countries especially within the educational programs is set to be improving the reading ability of the students in order to enable them to extract incoming information from the original sources in their fields. Reading is a basic and complementary skill in learning a language. Language learners need to learn how to read and how to communicate as well as reading a greater amount of authentic materials. Students learn to read more easily than acquiring any other language skills. Reading is no longer considered as a passive skill. There is always an interaction between the reader and the text. Rivers (1981) asserted that reading is clearly the most important activity in any language class, not only as a source of information and pleasurable activity but also as a means of consolidating and extending one's knowledge of the language. For many advanced students of English as a second language, reading English is both the primary means by which they become acquainted with the content of the subject area they are studying and the most important way in which they continue to develop their knowledge of the language itself (Celce-Murcia, 1979). An acceptable interactive reading involves direct extraction of meaning from the written discourse. Mature reading for comprehension is not mediated by sound. This requires active participation on part of the reader. The reader's mind is as active as in speech. (Widdoson, 1985). The present study was an attempt to take a step towards a better understanding of the process of reading comprehension and vocabulary repertoire. As a matter of fact, this issue has been the researcher's preoccupation ever since his involvement in EFL as a student and a teacher in a relatively short time. For this purpose, extensive reading through sustained silent reading as conducted and guided by the teacher seems to be an important variable and a comparison between sustained silent reading and regular teaching program is also of great importance.

Research questions

Based on the above mentioned points concerning reading skill, the researcher has proposed the following questions:

- 1. Does extensive reading through sustained silent reading have an impact on Iranian EFL learners' reading comprehension ability?
- 2. Does extensive reading through sustained silent reading have an impact on Iranian EFL learners ' reading vocabulary repertoire?

Research hypotheses

To come up with reasonable results on the basis of the foregoing questions of the study, the researcher has selected the following null hypotheses.

- I. Extensive reading through sustained silent reading does not have a significant impact on the learners' reading comprehension ability.
- II. Extensive reading through sustained silent reading does not have a significant impact on the learners' vocabulary repertoire.

METHOD

Participants

This study was conducted on Iranian sophomores majoring English Translation at Islamic Azad University of Rasht. They were all female students and their age ranged from twenty to twenty- six. The subjects were studying "English through Interaction." At first, 88 students were given a comprehensive English language test (CELT) in order to determine their English language proficiency level and through which 60 participants were selected. The rationale for giving the proficiency test was to select the homogeneous participants regarding their language proficiency.

Procedure

The administration of the tests and method was conducted during a term in 24 sessions for each group. It is worthwhile to mention that all the administrations of the tests were accomplished in three phases. One standard CELT test was administered randomly to have the required number of the participants among the total population. Then a reading comprehension and vocabulary test was administrated as a pre- test in order to ascertain the overall linguistic knowledge of the participants in reading comprehension and vocabulary. The pre-test functioned as a control measurement; that is, a basis for illustrating the different test scores between the exams and showing the process of the students' learning during the teaching period and treatment. After the period of treatment on experimental group which will be explained later, a post-test was administered. The post-test which served as an independent variable was the one that assessed the impact of sustained silent reading on the students' reading comprehension and vocabulary repertoire. The participants were divided into two groups. Each group included 30 students that were randomly assigned to either the experimental group or the control group. Both groups had instruction for ninety-minute periods for 24 sessions. The researcher applied the same teaching method for both groups. The only difference between the two groups was the material and the experimental group had thirty minutes sustained silent reading in the class as a treatment.

Design of the study

Among several research designs, the one which seemed to best fit the purpose of the present research was True Experimental Design. The researcher applied the true

experimental design, because of the existence of the following three characteristics: 1. A control group was presented. 2. The participants were randomly selected and assigned to the groups. 3. A pre-test was administered to capture the initial differences between the groups. In this design, a pre-test was administered before the treatment. There were two groups an experimental group which received the special treatment and a control group which did not. The participants were randomly assigned to one or the other group, and the decision as to which group was the experimental group was also decided randomly. A pre-test was given to both groups, then the treatment, and at last the post-test.

Table 1. Design of the study

	Groups	Pre-test	Treatment	Post-test
Random Selection	Control Group	T_1		T_2
Random Selection	Experimental Group	T_1	Х	T_2

RESULTS

To analyze the collected data of the present study, the statistics were first examined through the use of SPSS and STATISTICA packages.

PART I: In descriptive analysis of the data, central tendency indices with regard to each of the variables of the study were first calculated. The indices basically included the estimation of the mean, median, standard deviation, variance, and standard error of measurement.

PART II: In the inferential statistics, T-test was utilized to provide a check on the research hypotheses; i.e., to generalize the results obtained through statistical analysis of the data from sample to the population. Two-way ANOVA was also used.

PART III: The researcher utilized a standard test to homogenize the subjects. For this purpose, Comprehensive English Language Test (CELT) was administered to 88 students. The statistics on subjects' scores are presented in Table 2 below:

	Valid N	Mean	Median	Minimum	Maximum	Variance	Std. Dev.	Standard Error
CELT Score	88	56.67	60.00	21	86	379.23	19.47	2.08

Table 2. Descriptive statistics on CELT

The obtained mean is 56.67 and standard deviation 19.47 minimum maximum scores are 21 and 86, respectively. Figure 1 presents a graphic representation of the distribution of scores.



Figure 1. Distribution of scores

As the graph represents, the distribution of scores is very close to normal distribution (expected normal) and even the Kolmogorov- Smirnov Test index (K-S index) equaled 0.097 which is not meaningful at 95% level of significance (p>0.20). In other words, the obtained distribution of scores does not significantly differ from the normal distribution. Since the obtained distribution of scores did not significantly differ from the normal distribution, the researcher selected 68% of the subjects, those standing between $\overline{X} \pm 1SD$, as the subject pool for the purpose of this research. Therefore, 60 subjects were selected for the study; those who scored between 36.17 and 76.14.

These subjects were then divided into two homogeneous groups each with thirty individuals. One of the groups was assigned as the control and the other as the experimental group. Prior to the experimentation, T student for the independent was utilized to compare the CELT scores of the two groups. The purpose was to provide a second check on the homogeneity of the subjects. Table3 compares the means of the two groups:

Group	Means	Ν	Std. Dev.	Variance	Standard Error	t-value	df	р	F-ratio	p F-ratio
Control	58.30	30	12.67	160.42	2.31					
Experimental	58.87	30	12.63	159.57	2.31	-0.17	58	0.86	1.01	0.99
All Groups	58.58	60	12.54	157.37	1.62					

Table 3. Means compared on CELT in the experimental and control groups

The calculated T equaled 0.17 which is not meaningful at p>0.05 (58df). This way, the statistical hypothesis that there is no significant difference between the means of the two groups was confirmed; i.e., both groups are homogeneous. After making sure of the homogeneity of the subjects, the researcher started the experiment. Two reading comprehension and vocabulary tests were administered as the pre-test and the scores were registered. Then, the experimental group received the experiment. Later, a similar test was administered as the post-test. Descriptive statistics on reading comprehension

test of both experimental and control groups in pre-test and post-test are presented in Table 4 below.

Stage	Group	Means	Ν	Std. Dev.	Variance	Standard Error	Minimum	Maximum
Dro toat	Control	58.23	30	12.44	154.67	2.27	18.00	83.00
Pre-test	Experimental	58.67	30	12.55	157.40	2.29	20.00	84.00
	All Groups	58.45	60	12.39	153.44	1.60	18.00	84.00
	Control	60.63	30	12.04	145.07	2.20	24.00	86.00
Post test	Experimental	70.43	30	11.78	138.67	2.15	36.00	96.00
	All Groups	65.53	60	12.80	163.88	1.65	24.00	96.00

Table 4. Descriptive statistics: pre-test and post-test reading comprehension in theexperimental and control groups

The mean of the control group in pre-test was 58.23 (SD 12.44), while in the experimental group mean equaled 58.67 (SD 12.55). Therefore, it seems that the two groups did not perform differently on the pre-test. In other words, means were nearly the same. On the other hand, the mean of the control group in post-test was 60.63, while mean in the experimental group equaled 70.43. Thus, it so seems that the mean of the experimental group in post-test exceeded the mean in the control group. It should be kept in mind that holds true in the case of sample. To generalize the results to a larger population, there is a need for further evaluation of the data provided below. Figure 2 present a graphic representation of the means in the experimental and the control groups.



Figure 2. Comparison of reading comprehension scores in the two groups in pre-test and post-test

Table 5 presents data on descriptive statistics on vocabulary test of both experimental and control groups in pre-test and post-test.

Stage	Group	Means	Ν	Std. Dev.	Variance	Standard Error	Minimum	Maximum
Pre-test	Control	60.80	30.00	16.16	261.06	2.95	24.00	85.00
	Experimental	62.23	30.00	16.13	260.05	2.94	27.00	83.00
	All Groups	61.52	60.00	16.02	256.66	2.07	24.00	85.00
	Control	61.43	30	15.48	239.63	2.83	27.00	87.00
Post test	Experimental	72.30	30	15.11	228.36	2.76	38.00	98.00
-	All Groups	66.87	60	16.13	260.05	2.08	27.00	98.00

Table 5. Descriptive statistics of pre-test and post-test vocabulary as to theexperimental and control groups

The mean of the control group in pre-test was 60.80, while in the experimental group mean equaled 62.23, while, the mean of the control in post-test was 61.43, while mean in the experimental group equaled 72.30. Consequently, it gives the impression that the two groups not perform differently on the pre-test. While, the post-test mean of experimental group exceeded the mean in the control group. The second point is that the control group did not have a significant growth, although in the experimental group this difference has been considerable. Figure 3 is a representation of the means:



Figure 3. Comparison of vocabulary scores in the two groups in pre-test and post-test

4.3. Inferential Statistics This section is dedicated to the generalization of the results from the sample to the population. In the previous section, descriptive statistics on vocabulary and reading comprehension tests for the control and the experimental groups in pre-test and post-test were reported. In this section, research hypotheses are re-evaluated and the significant reported differences are dealt with. Two statistical procedures might be employed to compare and contrast the scores obtained on reading comprehension tests by the control and the experimental groups in pre-test and post-test. The first procedure is to calculate the difference of scores for each subject on the pre-test and the post-test; i.e., the Difference Score. In fact, these scores reflect subjects ' progress or retreat. By comparing the mean Difference Score of the control and the experimental groups, the impact of the independent might be examined. The second procedure is to use two-way ANOVA repeated measurement. The statistical procedure acts the same in both cases. As stated earlier, the first research question of the study

was: Does extensive reading through sustained silent reading have an impact on the students' reading comprehension ability? Descriptive statistics and the statistical results are presented in Table 6 below:

Group	Means	Ν	Std. Dev.	Var.	Std. Err.	Min	Max	t-value	df	р
Control	2.40	30	1.54	2.39	0.28	0.00	6.00	_		
Experimental	11.77	30	2.75	7.56	0.50	1.00	16.00	-16.26	58	0.00
All Groups	7.08	60	5.22	27.20	0.67	0.00	16.00	-		

Table 6. Descriptive statistics

The mean of variation or progress in reading comprehension in the control group equals 2.40 (SD 1.54), whereas in the experimental group the mean of variation or progress is 11.77 (SD 2.75). The computed t equals 16.24 at p<0.01. Thus, the null hypothesis that extensive reading through sustained silent reading does not have any impact on the learners' reading comprehension ability is rejected. Evidently, the mean score of the experimental group has had significant increase. Figure 4 compares treatment effect in both groups:



Figure 4. Treatment effects on reading comprehension in both experimental and control groups

As stated earlier, the same hypothesis might be analyzed through analysis of variance. To do so, two independent variables are taken into consideration: first, the grouping which includes two experimental and control levels and the tests that includes the pretest and the post-test. With this assumption reading comprehension scores are again examined.

Table 7. Analysis of variance to compare different scores for reading comprehension	n in
the experimental and control groups (pre-test and post-test)	

Sources of Var.	SS	df	MS	F	р
Group	785.41	1	785.41	2.66	0.11
Error	17134.08	58	295.42		
Stage	1505.21	1	1505.21	605.07	0.00
Stage*Group	658.01	1	658.01	264.51	0.00
Error	144.28	58	2.49		

The estimated f as to the comparison of the two groups (2.66) is not meaningful at 95% level of confidence (df 1). The estimated f regarding the comparison of the two tests (pre-test and post-test) equals 605.07 is meaningful at 99% level of confidence (df 1). Yet the most important part of the F-test is the comparison of the interaction between the two tests, which equals 264.51 at 99% level of confidence (df 1). Therefore, the null hypothesis is rejected. That is, there exists a significant difference between the performance of the subjects in the experimental and control groups in the pre-test and the post-test. Post-hoc analysis traces the way these two groups performed differently. Least Significant Difference (LSD) was utilized for this purpose:

		Cor	ntrol	Experimental		
Group	Stage	Pre-Test	Post-Test	Pre-Test	Post-Test	
		58.23	60.63	58.67	70.43	
Control	Pre-Test		0.00	0.92	0.00	
CONTROL	Post-Test	0.00		0.53	0.03	
Experimental	Pre-Test	0.92	0.53		0.00	
	Post-Test	0.00	0.03	0.00		

Table 8. LSD analysis to compare reading comprehension scores in the pre-test and thepost-test

The difference between the two groups is not meaningful in the pre-test. This means that the two groups performed nearly the same prior to any effect or impact by the independent variable. But the difference in the post-test is significantly meaningful-mean of the experimental group exceeds the control group. In the meantime, scores in the post-test of the control group was higher than the pre-test scores in the same group. The same has gone true for the experimental group. In the case of the experimental group, the changes might be linked to the influence of the independent variable. However, the improvement of scores in the control group might be related to learning effect. Overall, the improvement in reading comprehension by the experimental group went beyond the control group, although both had better scores in the post-test compared to the pre-test. The second research question was: Does sustained silent reading have any impact on the students' vocabulary repertoire? Descriptive statistics and the statistical results are presented in Table 9 below:

Table 9. Comparison of different scores for vocabulary in the experimental and controlgroups.

Group	Means	N	Std. Dev.	Var.	Std. Err.	Min	Max	t-value	df	р
Control	0.63	30	1.54	2.38	0.28	-3.00	4.00			
Experimental	10.07	30	2.45	6.00	0.45	5.00	15.00	-17.86	58	0.00
All Groups	5.35	60	5.17	26.74	0.67	-3.00	15.00			

The mean of variations or progress in vocabulary in the control group equals 0.63 (SD 1.54), whereas in the experimental group the mean of variation or progress is 10.07 (SD 2.45). The computed t equals 17.86 at p<0.01. Thus, the null hypothesis that sustained silent reading does not have any effect on the students' vocabulary repertoire is

rejected. Evidently, the mean score in vocabulary of the experimental group has had significant increase. Figure 5 compares treatment effect in both groups:



Figure 5. Treatment effects on vocabulary in both experimental and control groups

The same hypothesis is analyzed through analysis of variance. The results are presented in Table 10 below.

Table 10. Analysis of variance to compar	e different scores for vocabulary in the
experimental and control grou	ups (pre-test and post-test)

Sources of Var.	SS	df	MS	F	р
Group	1134.68	1	1134.68	2.30	0.13
Error	28562.42	58	492.46		
Stage	858.67	1	858.67	410.18	0.00
Stage*Group	667.41	1	667.41	318.82	0.00
Error	121.42	58	2.09		

The estimated f as to the comparison of the two groups (2.30) is not meaningful at 95% level of confidence (df 1). The estimated f regarding the comparison of the two tests (pre-test and post-test) equals 410.18 is meaningful at 99% level of confidence (df 1). Yet the most important part of the F-test is the comparison of the interaction between the two tests, which equals 318.82 at 99% level of confidence (df 1). Therefore, the null hypothesis is rejected. That is, there exists a significant difference between the performance of the subjects in the experimental and control groups in the pre-test and the post-test. Post-hoc analysis traces the way these two groups performed differently. Least Significant Difference (LSD) was utilized for this purpose:

	Stage	Control		Experimental	
Group		Pre-Test	Post-Test	Pre-Test	Post-Test
		60.80	61.43	62.23	72.30
Control	Pre-Test		0.10	0.80	0.01
	Post-Test	0.10		0.84	0.04
Experimental	Pre-Test	0.80	0.84		0.00
	Post-Test	0.01	0.04	0.00	

Table 11. LSD analysis to compare vocabulary scores in the pre-test and the post-test

The difference between the two groups is not meaningful in the pre-test. This means that the two groups performed nearly the same prior to any effect or impact by the independent variable. But the difference in the post-test is significantly meaningful-mean of the experimental group exceeds the control group. The difference between the pre-test and the post-test in the experimental group is also meaningful. Therefore, it can be concluded that during the experimental group the vocabulary scores of the subjects increased. In the meantime, scores in the post-test of the control group was higher than the pre-test scores in the same group. The same has gone true for the experimental group. In the case of the experimental group, the changes might be linked to the influence of the independent variable. However, the improvement of scores in the control group might be related to learning effect. Overall, the improvement in reading comprehension by the experimental group went beyond the control group, although both had better scores in the post-test compared to the pre-test. Figure 6 compares treatment effect in both groups for reading comprehension and vocabulary:





CONCLUSION

The purpose of present study was to find out whether there is any impact of extensive reading through sustained silent reading on the development of Iranian EFI learners ' reading comprehension ability and vocabulary knowledge. Based on the problem stated above, two null hypotheses were introduced: I. Extensive reading through sustained silent reading has no significant impact on the learners' reading comprehension ability. II. Extensive reading through sustained silent reading has no significant impact on the learners' reading comprehension ability. II. Extensive reading through sustained silent reading has no significant effect on the learners' vocabulary repertoire. In an attempt to test the null – hypotheses, two way ANOVA and T-Test technique were used. Based on the statistic results that gained in preceding part the null – hypotheses were rejected .The results revealed that there was an effect of SSR on the development of reading comprehension ability and vocabulary repertoire of students. The results and finding of descriptive statistics showed significant difference among the experimental group who had access to SSR treatment and control group who were deprived of it. Furthermore, the researcher could conclude

that this impact as a positive one because the result clearly supported the idea that extensive reading through sustained silent rearing could reinforce and enhance students reading comprehension and vocabulary repertoire. Considering the result of this study, one can conclude that the observed differences in the performance of the experimental and control group on the post-test was due to the experimental treatment. If teachers use sustained silent reading activities in reading comprehension and vocabulary, it will lead to progress on the part of the learners.

REFERENCES

- Bell, T. (1994). "Intensive" versus "Extensive" Reading: A Study of the Use of Graded Readers as Supplementary Input Material to Traditional "Intensive" Reading Techniques.' Unpublished MA TEFL Dissertation. University of Reading.
- Herda, R. and Ramos, F. 2001. How consistently do students read during sustained silent reading? *California School Library Journal 24* (2), 29-31.
- Krashen, S. 1994. The input hypothesis and its rivals. In N. Ellis (Ed.) *Implicit and Explicit Learning of Languages.* London: Academic Press. pp. 45-77.
- Coady, J. (1993). Research on ESL/EFL vocabulary acquisition: Putting it in context. In T. Huckin & M. Haynes & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 3-23). Norwood, N.J.: Ablex.
- Dwyer, E.J. & Reed, V. (1989) "Effects of Sustained Silent Reading on Attitudes toward Reading." *Reading Horizons, 29*(4), 283-293.
- Grubaugh, S. (1986) "Initiating Sustained Silent Reading in Your School." *Clearing House*, 60(4), 169-174.
- Hatch E & Farhady H, (1981). *Research Design and statistics for Applied Linguistics*. Rahnama Publications.
- Kalb, G. (1986). 'Teaching of extensive reading in English instruction at the senior gymnasium level.' *Die Neueren Sprachen, 85*, (pp 420-430).
- Wiesendanger, K.D. & Birlem, E.D. (1984) "The Effectiveness of SSR: An Overview of the Research." <u>Reading Horizons</u>, 24(3), 197-201.

Williams, R. (1986). 'Top ten' principles for teaching reading. *ELT Journal, 40,* 4245.