

Expanding Eye Span and Motion Among EFL

Senior Learners to Enhance Reading Speed

Dr. Ayman Mohamed El-Esery (corresponding author)

Assistant Professor of TEFL, Qassim University, Saudi Arabia

Teacher of English Language, King Marriott Higher Institutes, Alex. Egypt

E-mail: elesery_ayman@yahoo.com

Received: August 20, 2016 Accepted: September 16, 2016 Published: December 08, 2016

doi:10.5296/jet.v4i1.10421

URL: <http://dx.doi.org/10.5296/jet.v4i1.10421>

Abstract

The present study investigated the impact of manipulating electronic reader programs for developing EFL senior learners' reading speed and loud reading skills. 20 EFL senior participants from King, Marriott Academy, Alex., Egypt represented the sample of the study. The treatment proved to be effective in developing reading speed and loud reading skills. Results show that students attended the post reading test expanded their reading speed on normal by 45 words per minute (WPM) and loud reading skills by 20%. The study proved that there is no statistically significant correlation between speed reading and reading comprehension.

Keywords: speed reading, loud reading, eye span, eye motion, reading comprehension

1. Background

1.1 Eye Span and Speed Reading

Nagaraj (1990, p. 125) defines eye span as "the number of words a reader can take in a time". Reading span or eye span is "the amount of printed text that a person can perceive within a single fixation pause, usually as being between seven and ten letters spaces" (Richards, Platt and H. Platt, 1992, p. 307). Kwon, Legge and Dubbels (2007) Define visual span as "the region around the point of fixation within which characters of a given size can be resolved". Liege and ubbels mention that normally sighted adults have a visual span of 7-11 letters.

Sutz and Weverka (2009) mention that the wider the vision span is, the more words one can process in an eye fixation and the faster you can read. Acquiring the ability to see many words at a time is essential for speed reading. Also, Richards, J. Platt, and H. Platt (1992, p. 347) stress that readers need to be trained on effective eye movements when reading. Kana'an, Abdul Rab, and Siddiqui (2014) trained a group of EFL learners on expanding their reading

vision span and the study concludes that the adopted techniques are effective in developing speed reading.

1.2 Speed Reading and Comprehension

Researchers portrayed the positive relation between speed reading and comprehension in first language (L1). Nicholson and Tan (1997) and Levy and Kysynchuk (1997) confessed that youngsters' speed reading in first language (L1) increases comprehension. However, other researchers like Schwanenflugel et al., 2006, Kuhn and Stahl, 2003 and Bell, 2001 have exhibited a frail relationship between reading fluency and comprehension.

As for the second and the foreign language, there is no clear vision about the relation between speed reading and comprehension. Alessi and Dwyer (2008) indicated that in second language speed reading and comprehension aren't competing; speed reading promotes comprehension. While in 2010 Chang introduced 13 weeks speed reading program to 84 EFL university students and the results showed that the subjects reading speed was improved by 25% and their reading comprehension increased by 4% which is very low. Thus, the present study tried to investigate the association between speed reading and comprehension.

2. Method

2.1. Participants and Setting

Participants were 20 4th grade English major students (12 girls and 8 boys). Participants were recruited from King Marriott Higher Institute of Tourism and Hospitality, King Marriott Academy, Alex., Egypt.

2.2 Materials and Measures

2.2.1 Speed Reading & Comprehension Test

The researcher conducted a speed reading and comprehension test (see appendix I) to evaluate the participants' reading speed (WPM) and comprehension. Two reading passages are adapted from the Copyright Read Theory, LLC (www.ReadTheory.org) to be used in the test. The first passage that used in pre testing contains 281 words. The post testing passage contains 341 words.

- Test Reliability & Validity

Cronbach's alpha was computed for checking test reliability. Cronbach's alpha is 0.766 suggesting that the items have relatively high internal consistency.

To verify the content validity of the test, the first version of the test was submitted to a panel of language instructors and EFL specialists. The jurors were required to give their point of view concerning the evaluation of test items, grading technique and test feasibility.

2.2.2 Loud Reading Checklist

The researcher conducted a loud reading checklist (appendix II) to assess the correctness of participants' loud reading. The checklist concentrates on 5 reading errors; (1) mispronunciation, (2) omissions, (3) additions, (4) substitution and (5) skipped lines.

2.3 Treatment

Natural Reader software (available from: <http://naturalreaders.com/index.html>) was used in the treatment. 30 reading comprehension passages from the Copyright Read Theory, LLC were chosen to be used with Natural Reader software. Each passage contains approximately from 300 to 400 words and provide information across a variety of subjects. Multiple choice comprehension quiz follows each passage.

2.4 Procedure

First the participants sat for speed reading/loud reading test. Participants were asked to read the pre-reading passage. When they start reading aloud the researcher started a stopwatch to calculate reading speed. During the first minute the researcher recorded the errors for the purpose of catching loud reading errors. Loud reading errors were scored in the checklist conducted by the researcher (appendix 2).

The treatment took place during the first semester of the academic year 2015-2016. The treatment was conducted in 30 sessions. After finishing the treatment, the participants sat for speed reading/loud reading test. Finally the results of the pre/post tests were statistically analyzed to assess the effectiveness of the treatment.

3. Results

3.1 Speed Reading

Q1: Is the treatment effective in developing reading speed of participants?

Paired samples t-test is used to investigate the previous question. As presented in table (1).

Table 1. Significance of difference between the mean scores of the participants' pre-post speed reading testing

Testing	Mean	Std. Deviation	df	t	Sig.
Pre-testing	3.3780	.66440	19	6.564	0.001
Post-testing	2.6545	.44767			

As presented in table (1) the participant's mean score in speed reading pre testing is 3.378 versus 2.65 in post testing, "t" value is 6.56 and significant at 0.001 with 19 "df". The aforementioned result highlights the effectiveness of the treatment in increasing the speed of reading among participants.

Considering the participants speed reading through specifying words per minute (WPM); it is 83 WPM in pre testing versus 128 WPM in post testing, with 45 words increase in post testing.

3.2 Loud Reading Skills

Q2: Is the treatment effective in developing loud reading skills?

Means of scores and paired samples t-test are presented in table (2).

Table 2. Significance of difference between the mean scores of the participants' pre-post loud reading testing

Testing	Mean	Std. Deviation	df	t	Sig.
Pre-testing	1.70	.732	19	7.958	0.001
Post-testing	3.70	.978			

Participants' mean score in pre loud reading testing is 1.70 versus 3.70 in post testing. T-test value is 7.958 and significant at 0.001 with 19 "df". The aforementioned values indicate that the treatment is effective in developing the participants' loud reading skills.

3.3 Correlating Speed Reading and Comprehension

Q3: Is there a correlation between speed reading and comprehension? What is its type and direction?

To investigate the type and direction of correlation between speed reading and comprehension, the researcher used simple linear regression. The value of "R" in pre testing is .079 and "R²" is .006, these values indicate that there is no significant correlation between reading speed and comprehension in pre testing.

Furthermore standardized and unstandardized coefficients are calculated in table (3).

Table 3. Coefficients of pre speed reading/pre comprehension tests

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.537	.497		7.116	.000
Pre comprehension test	-.031-	.093	-.079-	-.336-	.741

Table 3 indicates that the standardized coefficient is .079 and unstandardized coefficient is .031, t-value is .336 which is not significant (Sig. .741). These results are represented by the following figure.

Regarding post testing the value of "R" is .087 and "R²" is .087. The following table (4) highlights the standardized and unstandardized coefficients.

Table 4. Coefficients of post speed reading/post comprehension tests

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.148	.389		8.083	.000
Post comprehension test	-.093	.071	-.295	-1.310	.207

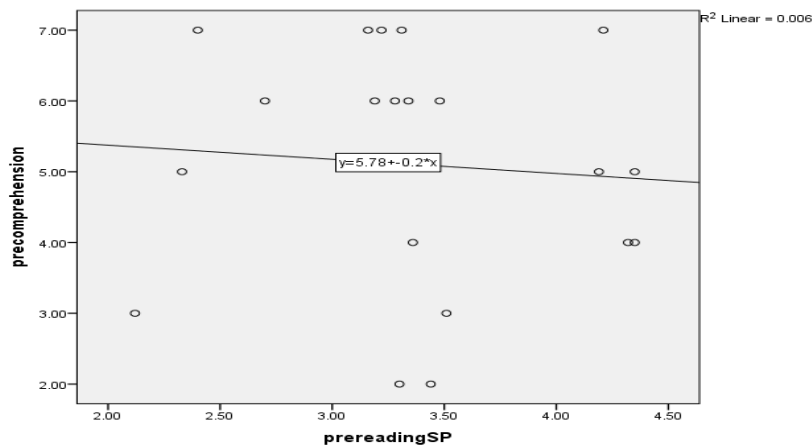


Figure 1. Pre reading speed and pre comprehension linear regression

Unstandardized coefficient is .093 and standardized coefficient is .295, t-value is 1.310 with .207 level of significance. Previous values indicate that there is no significant correlation between speed reading and comprehension in post testing. Figure (2) presents the linear regression between post speed reading and post comprehension tests.

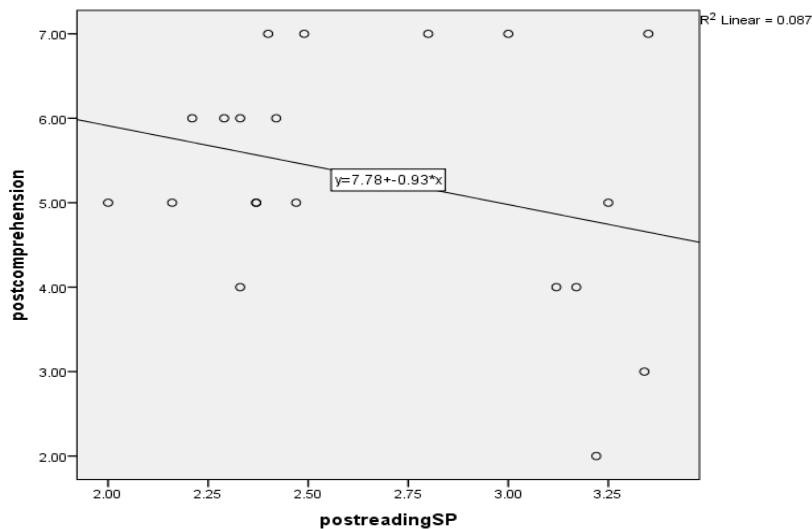


Figure 2. post reading speed and post comprehension linear regression

Close inspection of figure 2 shows that there is a slight positive correlation between speed reading and comprehension in post testing, while such correlation is not a significant one.

4. Discussion and Conclusion

The study examined the effectiveness of the treatment on speed reading and loud reading skills. Results proved that participants' speed of reading improved with 45 WPM. As for loud reading skills; the treatment proved to be effective. The electronic program (Natural Reader) helped the participants to decrease eye fixations.

Buzan (2010) mentions that while reading the eye is moving and pausing and these pauses take up the most of the time. The researcher realized that EFL learners go backward many times during loud reading, also they loose line at different times.

The electronic reader (Natural Reader) helped the participants to move smoothly and quickly while reading. The program highlights the extract being read. Participants learned to enlarge their reading space and move smoothly to the next reading extract. Furthermore the program helped the participants to decrease eye fixations while reading English texts.

The study proved that there is no statistically significant correlation between speed reading and reading comprehension. Diverse components participate in EFL learners' reading comprehension similar to vocabulary and background (schema). Familiarity of vocabulary and previous knowledge about the reading topic help in comprehension. With respect to reading speed, the results of the study proved that speed reading doesn't influence reading comprehension among EFL senior learners.

References

- Alessi, S., & Dwyer, A. (2008). Vocabulary assistance before and during reading. *Reading in a Foreign Language, 20*(2).
- Bell, T. (2001). Extensive Reading: Speed and Comprehension. *The Reading Matrix, 1*(1), 1–13.
- Buzan, T. (2010). *The speed reading book*. BBC. Harlow, England.
- Chang, A. C. S. (2010). The effect of a timed reading activity on EFL learners: speed, comprehension, and perceptions. *Reading in a Foreign Language, 22*(2), 284–303.
- Kana'an, B., Abdul Rab, S., & Siddiqui, A. (20014). The effect of expansion of vision span on reading speed: A case study of EFL major students at King Khalid University. *English Language Teaching, 7*(10).
- Kuhn, M., & Stahl, S. (2003). Fluency: A review of development and remedial practices. *Journal of Educational Psychology, 95*(1), 1–21.
- Kwon, M., Legge, G. E., & Dubbels, B. R. (2007). Developmental changes in the visual span for reading. *Vision Research, 47*, 2889-2900. Retrieved from <http://www.sciencedirect.com>

Levy, B., Abello, B., & Kysynchuk, L. (1997). Transfer from word training to reading in context: Gains in reading fluency and comprehension. *Learning Disability Quarterly*, 20, 173–188.

Nagaraj, G. (1996). *English Language Teaching: Approaches Methods Techniques*. Orient Longman Limited. Hyderabad. India.

Nicholson, T., & Tan, A. (1997). flashcards revisited: training poor readers to read words faster improves their comprehension of text. *Journal of Educational Psychology*, 89 (2), 276–288.

Richards, J. C., Platt, J., & Platt, H. (1992). *The Longman dictionary of language teaching and applied linguistics*. Longman Group UK Limited. Essex.

Schwanenflugel, P. J., Meisinger, E. B., Wisenbaker, J. M., Kuhn, M. R., Strauss, G. P., & Morris, R. D. (2006). Becoming a fluent and automatic reader in the early elementary school years. *Reading Research Quarterly*, 41(4), 496–522.

Sutz, A. R., & Weverka, P. (2009). *Speed reading for dummies*. Willey Publishing Inc. Indiana.

Copyright Disclaimer

Copyright reserved by the author(s).

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).