Short-Term Memory Processes In Children With Learning Disabilities.

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Abstract: The study evaluates the extent of online teaching among instructors at the selected universities in the Philippines. The study utilized 120 faculty members from the private and state universities in the Philippines. Participants of this study were classified according to gender, type of residence, number of years in teaching, highest educational attainment, and department. The researchers used quantitative and qualitative research designs. The quantitative research design utilized a Likert -type data instrument and statistical tools used were mean, t-test, and Analysis of Variance (ANOVA). The study was submitted and evaluated for its contents by the experts in the qualitative method. Moreover, qualitative data and information will be gathered through the interview to be conducted by the researchers themselves. The qualitative design process was guided by the qualitative and qualitative experts and was based on a qualitative framework by Creswell (2012). Results revealed that online teaching using JEL was "very high." The challenges derived from the qualitative views and statements experienced by the respondents were the following: (1) interrupted and unstable signal, (2) technical issues in the middle of using, (3) unpreparedness of the respondents as they shared that they need more training and hands-on, and (4) frequent maintenance of JEL.

Keywords: reading comprehension, English language, learning disabilities, reading speed.

INTRODUCTION

Reading comprehension is the heart of the reading process. The educational system, with all its categories, seeks to provide students with this skill to help them increase the level of awareness and to be owners of basic reading skills that enable them to understand vocabulary. Reading comprehension also helps students to perceive the different meanings of the read text, and the ability to analyze and evaluate. Reading comprehension skills are very important in determining the success or failure of the student in academic life. The development of reading speed skills for students is important in the basic stages, as the student in these stages is expected to be able to read quickly, and they are expected to read to benefit from new information [1].

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[1] Elizabeth B Meisinger, Juliana S Bloom, and George W Hynd, "Reading Fluency: Implications for the Assessment of Children with Reading Disabilities," *Annals of dyslexia* 60, no. 1 (2010): 1–17.

Students who read slowly due to their lack of speed in reading will not develop reading speed as other students who read quickly [2].

Because reading speed is so important to students, they should be trained to acquire this skill to achieve understanding. The faster the comprehension increases, the faster students can access important information, or obtain quick facts. There is no doubt that every student needs this kind of reading to keep pace with the rapid developments in this era (Bani Issa, 2010). Because of using traditional methods in schools to teach reading, a generation appeared that had reading difficulties, and many skills that students must master in reading are missing. Reading disability, if not addressed early, prevent students' progress and continued with them into other grades

Reading comprehension is a product of conscious reading that broadens and develops students' experiences, activates their intellectual skills, and provides students with the necessary information to solve many personal problems, to identify tendencies and increase them in breadth and depth, and develop a sense of self and the selves of others. It is appropriate for them, and pushes the mind to curiosity, reflection, and thinking, raises the level of understanding in social issues, raises the spirit of criticism for books, magazines, and newspapers, and makes the individual feel a sense of belonging to culture .[3]

Students face many difficulties in reading in English language, which constitutes an obstacle to their education and limits their activities and tendencies towards learning. Therefore, it is important to find more effective methods through the use of methods that attract their attention and excite them, and to eliminate the problems that they may face in learning to read.[4]

In contrast, school maladjustment can be defined as students' negative performances in their actions to solve the tasks imposed by the educational environment and it is related to the efficiency, progress, and success of the students in school. School maladjustment is primarily students' disordered relations with parents, teachers, classmates, and school staff, and related breaches of the rules of scholars and extra-scholars .[5] Maladjustment problems are often considered to be a heterogeneous set of behaviors, all of which make teaching more difficult and hinder the normal flow of the teaching-learning process in the classroom. In other words, school maladjustment usually involves a wide range of behaviors, which ultimately create problems in the educational environment .[6]

The problem of weakness in reading speed is one of the biggest problems that students face, especially in the basic education stages. This creates negative effects represented in the weak level of comprehension among students. Addressing this problem still needs more action to be take, Several studies tackled such an issue in a different context, but few Arabic studies have been

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[2] Lavina Fielding Anderson, "Always a Cowboy: Judge Wilson McCarthy and the Rescue of the Denver & Rio Grande Western Railroad" (JSTOR, 2010).

[3] Eliane Meire Soares Raslan, "Graphic Design and Brazilian Culture of HQS Present in Miners Comics," *HUMAN REVIEW: Revista Internacional de Humanidades* 4, no. 2 (2015): 1.

[4] Mehrak Rahimi and Seyyed Abolfazl Babaei, "The Relationship between Reading Strategy Use and Reading Comprehension as Mediated by Reading Rate: The Case of Eye Movement Training by Rapid Serial Visual Presentation (RSVP).," *Teaching English with Technology* 21, no. 1 (2021): 94–111.

[5] Emilia-Sanda CÎRCEIE, "Educaţia Religioasă În Lumina Relaţiilor Biserceşti Ortodoxe Interstatale.," *Astra Salvensis*, no. 2 (2021).

[6] Jesús de la Fuente Arias et al., "Estudio de Validacion Del Cuestionario de Problemas de Convivencia Escolar (CPCE)," *Psicothema* 24, no. 2 (2012): 330–337.

conducted on developing reading speed skills. Therefore, there is an urgent need to develop an experimental program to improve reading speed skills for students with learning disabilities to present results on which educational applications are based to raise the level of students in reading speed and then raising their level of understanding and comprehension. Therefore, it is hoped that the current study will contribute to filling a gap in this area .[7]

This study aims to identify the effect of using the reading speed strategy on developing the reading comprehension of students with learning disabilities in English language compared to the traditional methods.

LITERATURE REVIEW

Reading comprehension should elevate students to the level of awareness and cognition so that they become readers who possess reading skills that enable them to comprehend the linguistic units at advanced levels. It also helps students to raise their ability to accurately comprehend the reading, understand the vocabulary, the perception of the surface and deep meaning, and the ability to understand the aim and significance of the writer to make objective judgments about the text. Abu Riach defined reading comprehension as the process by which previous experiences and features of the reader are used to form meaningful meanings for each reader in a specific context, and that process includes selecting specific ideas and understanding them in one sentence[8].

Fadlallah stated that comprehending the reading material, especially in educational situations, is a guarantee of upgrading the learner's language, providing him with rich ideas, being familiar with useful information, acquiring the skills of criticism, and accustoming him to expressing opinions and passing judgments, and helping him to pursue everything new. Jad defined reading comprehension as a complex process that goes on at different levels, requires mental capabilities and abilities, and needs a lot of practice, training, interpretation, analysis, balance, and criticism.

It is clear from the above that reading comprehension is important for students, and that it is the main goal of the reading process. Indeed, some educators regard reading and comprehension as one thing. Therefore, reading comprehension skills must be present in the curriculum and the classroom due to the importance of comprehension in language communication, and understanding the linguistic message between the writer and the reader .[9]

Several studies have been conducted to investigate reading comprehension among students, and these studies have come up with different results. Bani Issa conducted a study

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[7] Jamie M Quinn et al., "Differential Codevelopment of Vocabulary Knowledge and Reading Comprehension for Students with and without Learning Disabilities.," *Journal of educational psychology* 112, no. 3 (2020): 608.

[8] Mohamad Ahmad Saleem Khasawneh, "The Use of Reading Speed Strategy in Promoting Reading Comprehension among EFL Students with Learning Disabilities," *Al-Lisan: Jurnal Bahasa (e-Journal)* 6, no. 2 (2021): 225–235.

[9] Yasmeen Mohammad Harthi, "The Effectiveness of the Use of Robinson's Strategy SQ3R in Developing Reading Absorption Skills with My Timeless Language Course for Middle-Class Second-Graders: فاعلية استخدام استراتيجية روبنسون (SQ3R) في تنمية مهارات الاستيعاب القرائي بمقرر لغتي الخالدة لدى طالبات الصف الثاني المتوسط," مجلة العلوم التربوية و النفسية 4, no. 25 (2020): 114–131.

aimed at identifying the effect of Paul Skelly's method of reading speed and reading comprehension among outstanding students in the elementary stage in Jordan. The study sample consisted of (60) students. The results of the study showed differences in reading comprehension skills and differences in reading speed skills on the two tests due to Paul Skelly's method and in favor of the experimental group[10].

Randy, Andrea, Christine, & Emily conducted a study aimed at accelerating the reading ability of children with slow reading ability. Reading was the first element among all groups, as children with low reading ability showed low goals in speed compared to their children's counterparts, and it indicated that the speed component was negatively associated with adult age.[11]

Babayigit examined the speed of reading texts students in the primary stage. The study used the survey of quantitative research methods. The sample of the study included 732 students. The study collected data from three primary schools in the areas of Yozgat province during 2018. The instrument of the study depended on measuring the number of words a student can reads in a minute. The results indicated the presence of clear difference in the reading rates of the text, especially between lower cased and upper cases letters. The results revealed that reading lowercase letters text was 13% higher than reading capital letters. The results also showed that secondary school students scored higher in reading aloud better than primary school students did[12].

Durukan investigated the effectiveness of a training based on fast reading on comprehension skills among secondary school students. The study was applied to a sample of 40 students from the 8th grade in Trabzon city. The study was based on the experimental approach, for which a pretest-posttest method was applied to one group. Before applying the study, the reading speed and comprehension levels of the students were identified. The participants received 20 hours of speed-reading training every other day for 5 days. The results of the study indicated significant improvement in the level of students after the implementation of the study.[13]

Deniz and Yavuz investigated the types of reading error and reading speeds among students with special learning difficulties. The study used the case study model and was applied to a sample of 34 students from Grades 3–8. These students were identified as students with LDs in Konya in the 2019–2020 academic year. The results of the study revealed different types of errors students with LDs have shown. These errors included misreading, hesitating while reading, repeating, omitting a word or skipping a line, substituting a sound/syllable or a word, pausing while reading, correction and reversing sounds.[14]

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[10] M Bani Issa, "The Effect of Paul Skelly's Method on Reading Speed and Reading Comprehension of Outstanding Students in the Basic Stage in Jordan" (PhD Thesis, Yarmouk University, Irbid, Jordan, 2010).

[11] Jacqueline L Williams et al., "Words Correct per Minute: The Variance in Standardized Reading Scores Accounted for by Reading Speed," *Psychology in the Schools* 48, no. 2 (2011): 87–101.

[12] Ozgur Babayigit, "Examining the Effect of Creative Writing Activities on Reading, Writing and Language Lesson Attitudes of Elementary School Fourth Grade Students," *European Journal of Educational Research* 8, no. 1 (2019): 213–220.

[13] Erhan Durukan, "Impact of Speed Reading Training on Reading Speeds and Comprehension Skills of Secondary School Students," *Kıbrıslı Eğitim Bilimleri Dergisi* 15, no. 2 (2020): 184–193.

[14] Serdal Deniz and Mehmet Yavuz, "Investigation of Reading Error Types, Reading Levels and Reading Speeds of Students with Special Learning Difficulties," *Cypriot Journal of Educational Sciences* 15, no. 4 (2020): 686–698.

METHODS
Population and Sample
The study population consisted of all students of the fifth grade of primary school in government schools in the Second Irbid District. The sample of the study was (80) male and female students. Table (1) shows the demographic information of the study sample.

Table 1. Demographic Distribution of the Study Sample

Group	Males	Females	Total
Experimental	٢٠	٢٠	٤٠
Control	٢٠	٢٠	٤٠
Total	٤٠	٤٠	٨٠

Research Instrument
The Reading Comprehension Test:

The test consisted of (20) items of a multiple-choice type and each item was assigned one mark. The test time was determined to be (40) minutes, and the pre-test was used to ensure the equivalence of the study groups. The same test was used after the completion of the implementation of the work plan.

Validity and Reliability of the Instrument
To ensure the validity of the instrument, the correlation coefficient was calculated. The correlation coefficients are shown in Table (2) below.

Table 2. The correlation coefficients of the study instrument

Item No.	Correlation Coefficient	Item No.	Correlation Coefficient
1.	٠,٦٣٧**	23.	٠,٦٦١**
2.	٠,٧٣٦**	24.	٠,٦٣٣**
3.	٠,٧٢٥**	25.	٠,٧٣٠**
4.	٠,٦٤٨**	26.	٠,٧٩٠**
5.	٠,٨٣٢**	27.	٠,٨٢٥**
6.	٠,٦٩٤**	28.	٠,٧٦٣**
7.	٠,٨١٦**	29.	٠,٧٧٩**
8.	٠,٨٣٦**	30.	٠,٨٥٢**
9.	٠,٨٢٠**		
10.	٠,٧٤٧**		
11.	٠,٨٨٧**		
12.	٠,٧٥٤**		
13.	٠,٨١٤**		
14.	٠,٨١١**		

15.	**٠,٥٤٢		
16.	**٠,٨٨٧		
17.	**٠,٩٠٨		
18.	**٠,٨٢٤		
19.	**٠,٨٩٩		
20.	**٠,٨٧٦		
21.	**٠,٦١٧		
22.	**٠,٧٠٥	**Overall**	**0.822

As illustrated in Table (2), the correlation coefficient for all the test items was above 0.40, and the overall correlation coefficient for the test was 0.822, which means that the test was valid to administer in the Jordanian environment. To ensure the reliability of the test, the internal consistency was calculated using the (Cronbach Alpha) statistical method to verify the consistency of the students' responses. The internal consistency results revealed that the Cronbach Alpha of the responses was (0.96.8), and this value is acceptable to accept the reliability of the test.

RESULT AND DISCUSSION

To answer the questions of the study, the mean scores and standard deviations of the sample's marks were calculated on the Reading Comprehension Test as shown in Table (3).

Table 3. The mean scores and standard deviations of the sample's scores in the post-test according to the study variables

Gender	Group			
	Experimental		Control	
	Means score	Standard deviation	Means score	Standard deviation
Males	١٩.٨١	٣.٥٦	١٤.٣٩	٤.٠٠
Females	٢٠,٩٠	٣.٠٨	١٤.٢٨	٤.٤٧
Total	٢٠.٣٥	٣.٣٢	١٤.٣٣	٤.٢٤

It is evident from Table (3) that the mean score of the experimental group of male students was (19.81) with a standard deviation (3.56). The mean score of the female from the experimental group was (20.90) with a standard deviation (3.08). On the other hand, the mean score of the control group of male students was (14.39) with a standard deviation (4.00), and the mean score of the control group of females was (14.28) with a standard deviation (4.47). The experimental group of males and females reached (20.35) with a standard deviation (3.32), while the total sum of the mean score of the control group was (14.33) with a standard deviation (4.24).

It is noticed that there are apparent differences between the mean scores of the groups of the study. To verify the statistical significance of these differences, the Two-way ANOVA analysis was used as shown in Table (4).

Table 4. Results of the Two-Way ANOVA analysis for the post-test according to the study variables

Source of variance	Sum of squares	Freedom value	Mean square	F-value	Sig.
Method	١٢٣٦,٤٠٥	١	١٢٣٦,٤٠٥	٩٣,٦٥٧	* ٠,٠٠٠
Gender	٥,٤٣٨	١	٥,٤٣٨	٠,٤١٢	٠,٥٢٢
Interaction between method and gender	١٤,٧٤١	١	١٤,٧٤١	١,١١	٠,٢٩٢
Error	١٨٢١,٨٠٥	١٣٩	١٣,٢٠١		
Total	٣٣٧٨,٢٨٠	١٤٢			

* Statistically significant at (α = 0.05)

It is clear from Table (4) that the results were as follows:

Results of the first question:

It is evident from Table (4) that the calculated F-value was (93.657) with a level of significance (0,000). This indicates the existence of statistically significant differences at (α = 0.05) on the reading comprehension test attributable to the teaching method (speed reading, traditional method) in favor of the experimental group that studied using speed reading strategy.

The reason for this result is that the use of speed-reading in teaching is considered a different method from the usual ways in which students learn to read. The change in the method of teaching led to great activity, suspense among students, and a tendency towards learning to read. Perhaps the reason for this result is that the speed-reading program is characterized by providing the student with the opportunity to participate in the learning and teaching process, being self-reliant and increasing self-confidence, which in turn increases motivation, interaction, and participation in the learning process.

Results of the second question:

It is evident from Table (4) that there are no statistically significant differences due to the gender of students, as the calculated F-value was (0.412) and its level of significance was (0.522), which is not statistically significant at (α = 0.05). The reason for this may be that the speed-reading strategy included educational units from the Arabic language book for the sixth grade, prepared by the Ministry, and intended to be taught to students, whether males or females.

This result can also be attributed to the fact that the speed-reading action plan is designed to suit both genders. It provides elements of excitement for male and female students, and it attracts the attention and involvement of the student in the learning process through exercises that are suitable for students of the basic sixth grade of both genders. This strategy also

increases their motivation towards learning, as the speed-reading action plan is concerned with developing reading skills for all students, male and female, and it did not target a specific group of students, but rather viewed the student as an educated individual with abilities and skills seeking to develop and improve them.

The reason for this result can be attributed to the tendency of students of both genders to get rid of the routine method and shift to modern methods, which makes them serious in their dealing with the speed-reading strategy. It helps students realize that they are facing a method that increases their activity and level of motivation, and opens up horizons of knowledge for them.

CONCLUSION

In light of the findings of the study, the researcher recommends the diversification of teaching methods to be suitable with the educational position, with a focus on the method of speed-reading, which the study revealed its positive effect. The study also recommends paying more attention and focus on helping students to develop their attitudes towards speed-reading, from teachers and parents, by encouraging students to speed-reading, and increasing their demand for it, as this has a positive impact on their reading comprehension.

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