

The Relationship Between Students' Reading Comprehension and Their Achievement in English

Dima Hijazi

Yarmouk University, Irbid, Jordan

This study aimed at investigating the relationship between students' reading comprehension and their achievement in English at Yarmouk University. The sample consisted of 150 female and male students. It was chosen randomly from all English101 students at Yarmouk University in the second semester of the academic year 2016-2017. To answer the questions of the study, the researcher used a reading comprehension test which consisted of 20 multiple-choice items and an achievement test which consisted of 40 multiple-choice items. The findings revealed that students' reading comprehension was of a medium degree and their achievement in English was of a medium degree, too. Besides, there were no statistically significant differences in students' reading comprehension or in their achievement due to gender. On the other hand, there were statistically significant differences in students' reading comprehension and in their achievement due to college in favor of the college of science. Moreover, there was a statistically significant relationship between students' reading comprehension and their achievement in English since reading comprehension positively affects students' achievement. Finally, the researcher recommended conducting further research to investigate the link between students' reading comprehension and their achievement in English since research in this area is rare.

Keywords: English 101, reading comprehension, students' achievement, foreign language

Introduction

Learning English is crucial since it is the language of communication worldwide. It plays a vital role in our life because it is linked with opportunities for a better living. Learning English indicates that we are taking the best steps towards the present and the future since it is the language that everybody needs to keep up with the information age (Hijazi, 2012).

When learning a language, there are four major skills (listening, speaking, reading, and writing) that are needed for completely appropriate communication. The mystery of such basic academic skills affects foreign language learners' success at both the school and the university levels (Tinto, 1993). In order to learn English appropriately, reading is an important skill that should be taken into consideration. It is the fastest and simplest way that enables students to strengthen their knowledge base. Besides, it helps students to raise their educational level (Tsai et al., 2001) and reinforces positively the learning of the other language skills.

In fact, the importance of students' reading skills and their relationship with their academic achievement was indicated by many researchers, such as Keskin (2013), Yıldız (2013), and Kerubo (2014). Reading is one of the best ways of learning since it enhances acquiring knowledge at all levels of education. Furthermore, it

improves learners' spelling abilities and enriches their vocabulary storage (Carson, 2000; Kolawole, 2009). Besides, it facilitates the development of literacy skills that everyone needs for effective communication in different contexts. Bright and McGregor (1978) mentioned that little language learning means that there is little reading.

Frankly speaking, reading alone without comprehension is not enough since students need to read texts to process them and understand their meanings. This is what is called reading comprehension. The RAND Reading Study Group (2002) defined comprehension as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (p. 11). In other words, reading comprehension means understanding information included in a text and interpreting it in a suitable way (Grabe & Stoller, 2002). Tonjes and Zintz (1991) indicated that reading comprehension is the real interaction that occurs between the reader and the text.

However, reading texts with comprehension means that the students will understand the purpose and function of the text, be aware of the main topic, how it develops from one paragraph to another, and understand the meaning of sentences as well as the relationships among them. Thus, the main goal of reading is to obtain a general understanding of what is included in the text rather than to obtain meanings from separate words or sentences (Duke & Pearson, 2002). Honestly, students who are not able to read appropriately and who are not able to process and comprehend what they read will not be able to succeed (Kerubo, 2014).

In general, many researchers (McCardle & Hoff, 2006; Hoffman, 2001) indicated that English as a foreign language (EFL) students encounter many difficulties while learning English which affect their achievement negatively. The difficulties may due to the fact that English teachers are not well-trained on how to teach English and its four skills appropriately. Also, they may not attract the interests of students or motivate them towards learning English. Besides, the curriculum sometimes is not suitable for helping students to enhance their levels of proficiency. Furthermore, some teachers do not use the appropriate learning strategies to improve the four skills of language (Souriyavongsa et al., 2013). As a result, EFL students in general and Jordanian students in specific are weak in English and their achievement is poor.

At the level of reading comprehension, difficulties and problems may stem from many sources. For example, students sometimes cannot read the words correctly so how can they understand what they cannot even read? Another challenge, students may just read word by word, or sentence by sentence. They may fail to understand the relationship between sentences and the meaning of any text as a whole so they do not access to the appropriate level of comprehension (Pardo, 2004). Possibly, it is partly because students are not informed to use effective levels of reading comprehension to comprehend a text effectively. To be more specific, students tend to focus on the meaning of individual words which may negatively affects their comprehension and their achievement in English in general.

Generally speaking, this paper discusses the relationship between students' reading comprehension and their achievement in English. In fact, this problem is really serious since reading affects the other skills of language. It is a critical basic skill for later academic learning.

Statement of the Problem

Teaching English is important nowadays since it is an international language and the most spoken all over the world. It allows students to communicate with people from other countries. The ability to read English texts and comprehend them appropriately is essential to students' English language proficiency in general.

In fact, the researcher is an instructor of English at the Language Center at Yarmouk University. While teaching students, she noticed that students face many difficulties concerning reading English texts included in their textbooks and concerning comprehending them in an appropriate way. Besides, she noticed that Yarmouk University students' achievement is not as good as expected.

Frankly speaking, teaching reading has become a concern among educators because success in reading means success in school and later in university. In spite of this fact, it has been observed from research (Lawal, 1997) and from the personal experience of the researcher that English language teachers often test students' reading comprehension instead of teaching them how to read and comprehend. Reading in an EFL context is applied only to carry out the tasks during the English class.

Besides, the researcher noticed that students lack appropriate reading strategies in English. Some students read without understanding and do not apply any strategy. However, Jordanian students suffer from weakness in English as a language in general and from weakness in reading comprehension in particular though teaching English has a special interest from the Jordanian government. As a result, the current study is conducted to examine the relationship between students' reading comprehension and their achievement in English at Yarmouk University since reading challenges are enormous and the relative lack of interest and poor reading habits have continued to be a source of worry for students.

Questions of the Study

In this study, the researcher attempts to answer the following questions:

1. What is the level of reading comprehension of English 101 students at Yarmouk University?
2. What is the level of Yarmouk University students' achievement in English 101?
3. Are there any statistically significant differences in the level of reading comprehension of Yarmouk University students studying English 101 due to their gender and college?
4. Are there any statistically significant differences in the level of Yarmouk University students' achievement in English 101 due to their gender and college?
5. Is there any statistically significant relationship between the level of reading comprehension of Yarmouk University students studying English 101 and their achievement?

Purpose of the Study

The purpose of this study is to find out the relationship between students' reading comprehension and their achievement in English 101 at Yarmouk University taking into consideration their gender and college.

Importance of the Study

The results of this study may be significant for both teachers and students. Firstly, this study may contribute to find out better ways of teaching reading comprehension to improve the knowledge needed in both classrooms and in policy making arenas. Teachers may consider new strategies for teaching reading comprehension that have to be carried out in creative ways to enhance students' intrinsic motivation and to help them have more positive attitudes towards English reading. To sum up, this study can encourage teachers to train students on how to process any reading text to understand its meanings and encourage students to use suitable skills and strategies to enhance their reading comprehension.

Also, this study may provide teachers with the best ways to assess students' reading abilities rather than testing students' abilities to understand and recall ideas and information directly stated in any given text.

Furthermore, the significance of this study may stem from the fact that very few studies were conducted, according to the researchers' knowledge, to investigate the relationship between the reading comprehension skill and students' achievement in English. As a result, the findings of this study can be used as a reference for other researchers to investigate the problem of this study and to conduct further research.

Operational Definitions of Terms

1. Reading comprehension: It is defined by The RAND Reading Study Group (2002, p.11) as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language." More specifically, it is the capacity to understand information in a text and process it in a suitable way (Grabe & Staller, 2002). In fact, it is measured in this study by the final mark that the student gets in the reading comprehension test prepared for this study.

2. Students' achievement: It is measured in this study by the final mark that the student gets in the English achievement test prepared for this study.

Limitations of the Study

The generalization of the results of this study is limited to English and non-English language major students studying English 101 at Yarmouk University for the academic year 2016-2017. Besides, the generalization of the results is limited to the instruments of the study which are multiple-choice exams.

Literature Review

There is an extensive research literature that discusses both strategies used to improve students' reading comprehension and factors that affect students' achievement in English. Unfortunately, surprisingly, there is a general lack of research on the issues surrounding the relationship between reading comprehension and students' achievement in English.

Concerning the studies that discussed strategies used to improve students' reading comprehension, Bani Abdelrahman, and Bsharah (2014) conducted a study to find out the effect of speed reading strategies on developing secondary students' reading comprehension in English language. The sample of the study was chosen randomly from many schools and divided into two groups: the experimental group and the control group. It consisted of 42 students. The experimental group was trained on how to use speed reading strategies. The results revealed that there were significant differences at ($\alpha \leq 0.05$) in favor of the experimental group. It was recommended that teachers should encourage using speed reading strategies in the classroom since they enhance students' reading comprehension abilities positively.

Another example was a study conducted by Bahloul (2013) at Gaza United Nation Relief and Works Agency (UNRWA) Schools to investigate the effect of using differentiated instruction strategy on enhancing ninth grade students' English reading comprehension skills. The total of the sample was 70 male students with 34 in the control group and 36 in the experimental group. The results indicated that there were significant differences in favor of the experimental group in all skills. The researcher recommended that EFL teachers need to train students on using differentiated instruction strategy to promote their reading comprehension.

On the other hand, some researchers conducted studies to investigate the factors that affect students' achievement in English, such as Souriyavongsa, Rani, Zainol Abidin, and Mei who conducted a study in 2013 to investigate the reasons that cause students' weakness in English, especially when they learn it as a foreign language and affect their achievement in a negative way. The sample of the study consisted of 30 English students-teachers who were asked to answer the question of the study giving their own point of view. The findings of this research revealed the reasons behind students' poor performance in English which are:

1. Most students indicated that the English teachers are not trained in an appropriate way;
2. Students' background knowledge in English is somehow poor;
3. Students do not feel enough confident to use English in front of their peers because of some psychological factors;
4. The curriculum doesn't enable students to enhance their English proficiency and does not take into consideration their individual differences, needs, and characteristics;
5. English language is a challenging subject because students are not enough motivated and do not use the appropriate learning strategies and methods;
6. Students do not practice English outside in real and authentic situations.

In fact, it is obvious that the literature lack of studies that examined the relationship between reading comprehension, reading success, and academic success in general. Besides, such studies relate other factors, such as reading motivation and reading attitudes with reading achievement. For example, Baker and Wigfield (1999) and Taboada et al. (2009) indicated that reading motivation affects reading abilities and these affect both reading comprehension and reading success in general.

Generally, some studies that investigated the effect of reading comprehension on academic achievement have focused on students' performance in mathematics, science, and social sciences but not English. These studies revealed that reading comprehension is considered as an essential component for students' academic achievement, such as the study of Grimm (2008) and Lerikkanen et al. (2005).

Chege (2012) conducted a study in five randomly primary schools in Machakos District. The aim of the study was to find out the relationship between pupils' reading comprehension and their academic performance in Glasgow Haskell Compiler (GHC), Kiswahili, Science, Mathematics, and English. The results of the study showed that there was a positive relationship between pupils' reading comprehension and their academic performance.

Yıldız (2013) conducted a study to find out how reading motivation, reading fluency and reading comprehension affect students' academic achievement in science, social sciences and mathematics. The sample of the study consisted of 135 fifth grade students studying in a school located in Etimesgut, town of Ankara. The results revealed that reading motivation, fluency, and comprehension affect positively students' academic achievement in general.

Bastug (2014) investigated the extent to which academic achievement in Mathematics, Science, and Social Sciences is affected by students' attitudes toward reading and reading comprehension. His study took place in the city of Nigde, Turkey. One thousand and two hundred twenty-eight fourth and fifth grade students from primary schools comprised the population of the study. Their attitudes toward reading were measured by using the "Reading Attitude Scale for Secondary Level Students." The instruments of the study were open-ended questions, multiple-choice questions, and cloze tests which were built based on narrative and expository texts

suitable for students' grade levels. The results indicated that reading attitudes and reading comprehension significantly affect academic achievement in general.

Kerubo (2014) conducted a study to reveal the relationship between reading comprehension practices and academic performance. This study was a case study. The sample consisted of a group of three pupils from Westlands Primary School in Kenya who were selected randomly. The findings showed that there is a significant positive relationship between reading comprehension practices and academic performance. Also, the findings revealed that there is a relationship between reading difficulties and academic performance.

Reed, Petscher, and Truckenmiller (2016) conducted a study to investigate the relationship between the reading ability and Grades 5, 8, and 9 students' achievement in science. The ability of reading was evaluated taking into consideration four measures: word recognition, vocabulary, syntactic knowledge, and comprehension. The results showed that a general element of reading ability, which includes two specific elements of discourse comprehension and word comprehension, was responsible to give reason for 70% of the difference in Grades 5 and 8 science performances and 64% of the difference in Grade 9 science performances. They also showed that lower reading ability of Grade 9 students was more strongly related with lower science performance.

Generally speaking, the researcher noticed that a lot was written in the literature about reading and the importance of teaching appropriate reading strategies for students to improve their reading comprehension. On the other hand, there is a lack of studies that have dealt with the relationship between reading comprehension and students' achievement especially in English language. In fact, some studies investigated students' academic achievement in Mathematics, Science and even Social Sciences neglecting the fact that English is an international language which should be taken into consideration because of its great importance. As a result, the researcher conducted this study to investigate the relationship between students' reading comprehension and their achievement in English which is taught as a foreign language in Jordan.

Method and Procedures

This part of the study presents the methodology that the researcher conducted in this study. It includes the population, the sample, the instrument and its validity and reliability, the dependent and the independent variables, and the procedures of the study.

Method of the Study

A descriptive analytical method was used in this study. This method studies a certain issue or a phenomenon in order to collect information that answers the questions of the study without any bias from the researcher.

The Population and the Sample of the Study

The population of the study consisted of all English (101) students at Yarmouk University in the second semester of the academic year 2016-2017. Out of these, the researcher selected a random sample consisted of 150 female and male students. Table 1 presents the distribution of the sample according to the variables of the study.

Table 1

Distribution of the Sample According to the Variables of the Study

Variable	College		Number
	Science	Humanities	
Gender			
Male	33	45	78
Female	33	39	72
Total	66	84	150

The Instrument of the Study

To best achieve the objectives of the study, the researcher used two instruments. First, the researcher chose one of the reading texts taught in English (101) entitled "Megalopolis" and developed a test to measure students' reading comprehension that totally covers the information included in that text. The test was a multiple-choice one which consisted of 20 items. The total mark of the test was 20. The second instrument was an achievement test which consisted of 40 multiple-choice items that measure reading, grammar, and vocabulary. These items were chosen randomly from the questions' bank prepared previously by a qualified and experienced group of instructors at the Language Center. The total mark of the test was 40.

Validity of the Instruments of the Study

In order to validate the two tests, the researcher asked a jury of EFL university professors to judge whether the items of the two tests were suitable, enough, and comprehensive. The researcher omitted some of the items and added new ones in response to the jury's suggestions.

Reliability of the Instruments of the Study

The reliability of the two tests was measured using test/retest strategy by administering each test on a pilot sample that consisted of 21 students from outside the sample of the study. Consistency coefficient for each test was calculated. Besides, Pearson correlation was calculated for each test. It ranged 0.91-0.78 for the reading comprehension test and 0.88-0.84 for the achievement test, and both were acceptable for the purpose of the study. In addition, difficulty coefficient and discrimination one were calculated for the two tests. For the reading comprehension test, the difficulty coefficient ranged 0.80-0.65 and the discrimination one ranged 0.76-0.39. But for the achievement test, the difficulty coefficient ranged 0.83-0.72 and the discrimination one ranged 0.79-0.62. All of the previous values are suitable for the purpose of the study.

Correcting the Instruments of the Study

The two tests were corrected according to an answer key for each test. Each correct answer has one mark and zero for each wrong one. The total mark for the reading comprehension test was 20 and the total mark for the achievement test was 40 (10 marks for reading, 15 marks for grammar, and 15 for vocabulary).

The Variables of the Study

The variables of the study were the following:

1. The independent variables: gender (males and females) and college (humanities and science);
2. The mediator variable: reading comprehension;
3. The dependent variable: achievement.

Procedures of the Study

The researcher made the following procedures for the purpose of collecting data:

1. Determining the population of the study and the sample;
2. Developing the instruments of the study (a reading comprehension test and an achievement test);
3. Applying the two tests;
4. Analyzing the results in light of the questions of the study;
5. Drawing conclusions and recommendations according to the results of the study.

Statistical Analysis

To answer the research questions, appropriate statistics were used as follows:

1. Means and standard deviations were calculated in order to answer the first and second questions;
2. Three-way analysis of variance (ANOVA) was used in order to answer the third and fourth questions;
3. Pearson correlation coefficient was calculated in order to answer the fifth question.

Results and Discussion

The first question was about the level of Yarmouk University English 101 students' reading comprehension. To answer this question, mean and standard deviation of reading comprehension were calculated as shown in Table 2.

Table 2

Mean and Standard Deviation of Reading Comprehension

Item	Mean	Std. deviation	Degree
Reading comprehension	10.72	4.263	Medium

Table 2 shows that the mean of reading comprehension of 101 students is 10.72 with a medium degree. This result may be due to the following different factors: 101 course books are full of information and instructors have a limited time to cover the material, so they do not have the needed time and the required effort to teach students the appropriate strategies and skills of reading comprehension. Instructors use the lecture-based approach rather than the interactive one which if used will better improve students' reading comprehension skill. In addition, students are weak in vocabulary and this affects their comprehension negatively.

The second question was about the level of students' achievement in English 101. To answer this question, mean and standard deviation of students' achievement were calculated. The results are shown in Table 3.

Table 3

Mean and Standard Deviation of Students' Achievement

Item	Mean	Std. deviation	Degree
Achievement	21.13	8.77	Medium

Table 3 shows that the mean of students' achievement in 101 is 21.13 with a medium degree. This result may be due to several factors. For example, there is a large number of students in each class. Thus, students do not have the chance to practice the language appropriately. Besides, there is a lack of the facilities needed for better learning. Furthermore, students themselves consider learning English as a very difficult matter since they do not often practice the language in real life situations. Also, they have little motivation towards learning English. They study English only for exam purposes not because they want to master the foreign language. In addition, there are many other reasons that affect students' achievement in English negatively, such as their background knowledge of English, the nature of the materials taught to them and the methodology their instructors follow while teaching the language.

The third question to be asked is are there any statistically significant differences in the level of students' reading comprehension due to their gender and college. To answer this question, means and standard deviations of students' reading comprehension due to their gender and college were calculated as shown in Table 4.

Table 4

Means and Standard Deviations of Students' Reading Comprehension According to Their Gender and College

Gender	College	Std. deviation	Mean	Number
Male	Science	4.444	11.24	33
	Humanities	3.968	10.07	45
	Total	4.189	10.56	78
Female	Science	4.394	12.39	33
	Humanities	3.964	9.62	39
	Total	4.366	10.89	72
Total	Science	4.423	11.82	66
	Humanities	3.949	9.86	84
	Total	4.263	10.72	150

It is noticed from Table 4 that there are observed differences between the means and standard deviations of students' reading comprehension due to their gender and college. In order to find out the significance of these differences, three-way ANOVA was used. The results are presented in Table 5.

Table 5

Three-Way ANOVA for the Effect of Gender and College on Students' Reading Comprehension

Source of variation	Sum of squares	Degrees of freedom	Squares average	F-value	Statistical significance
Gender	4.520	1	4.520	0.260	0.611
College	144.157	1	144.157	8.286	0.005
*College×Gender	23.684	1	23.684	1.361	0.245
Error	2539.970	146	17.397		
Total	2708.240	149			

***College ×Gender: Interaction between College and Gender**

Table 5 shows the following:

1. There are no statistically significance differences due to gender since F was 0.260 with a statistical significance of 0.611. This result may due to the fact that all the male and female students have the same conditions of learning since they learn in the same environment and under the same circumstances. Instructors also have the same facilities, the same mechanics of teaching, and follow the same ways to implement the activities of the curriculum and to teach reading comprehension.

2. There are statistically significance differences due to college in favor of the science colleges since F was 8.286 with a statistical significance of 0.005. This result may be because students of science colleges have more linguistic competence in English than those of the college of humanities. Besides, some of the courses that are related to the major of the students of science are taught in English not in Arabic as those courses that are taught to the students of humanities.

3. There are no statistically significant differences due to the interaction between gender and college since F was 1.361 with a statistical significance of 0.245. This result is due to what the author has mentioned

previously that all the students of English 101 learn in the same pedagogical environment, under the same circumstances and have the same conditions of learning.

The fourth question asked if there are any statistically significant differences in students' achievement due to their gender and college. To answer this question, means and standard deviations of students' achievement according to their gender and college were calculated as shown in Table 6.

Table 6

Means and Standard Deviations of Students' Achievement According to Gender and College Variables

Gender	Collge	Mean	Std. deviation	Number
Male	Science	9.582	21.76	33
	Humanities	8.014	19.91	45
	Total	8.700	20.69	78
Female	Science	9.048	24.61	33
	Humanities	8.031	19.08	39
	Total	8.895	21.61	72
Total	Science	9.358	23.18	66
	Humanities	7.984	19.52	84
	Total	8.777	21.13	150

From Table 6, it is noticed that there are observed differences between the means and standard deviations of students' achievement due to their gender and college. In order to find out the significance of these differences, three-way ANOVA was used. The results are presented in Table 7.

Table 7

Three-Way ANOVA of the Effect of Gender and Ccollege on Students' Achievement

Source of variation	Sum of squares	Degrees of freedom	Squares average	F-value	Statistical significance
Gender	37.406	1	37.406	0.504	0.479
College	501.520	1	501.520	6.758	0.010
*College×Gender	125.031	1	125.031	1.685	0.196
Error	10834.353	146	74.208		
Total	11477.333	149			

*College ×Gender: Interaction between College and Gender.

It is obvious from Table 7 that there are no statistically significant differences due to gender since F was 0.504 with a statistical significance of 0.479. On the other hand, there are statistically significant differences due to college in favor of the science colleges since F was 6.758 with a statistical significance of 0.010. The table also shows that there are no statistically significant differences due to the interaction between gender and college since F was 1.685 with a statistical significance of 0.196.

The fifth question asked if there is any statistically significant relationship between students' reading comprehension and their achievement. To answer this question, Pearson correlation coefficient between students' reading comprehension and their achievement was calculated. The results are shown in Table 8.

Table 8

Pearson Correlation Coefficient of the Relationship Between Students' Reading Comprehension and Their Achievement

Dimension	Correlation coefficient	Achievement
	correlation coefficient	585**
Reading comprehension	Statistical significance	000*
	Number	150

Notes. ** Statistically significant at the significance level (0.01); * Statistically significant at the significance level (0, 05).

Table 8 shows that there is a statistically significant relationship between students' reading comprehension and their achievement. Frankly speaking, the previous result may be due to the fact that reading comprehension develops the other language skills, enriches students' vocabulary storage, activates their background knowledge, enhances their learning experiences, helps them to develop emotionally, intellectually, and socially even in their professional and personal life, increases their motivation towards learning, enhances their self-confidence and satisfaction, and helps them to use language in a meaningful way. As a result, if students' reading comprehension abilities increase, their learning competences and their achievement will improve and this will be reflected positively on their performance and their academic success in general. In fact, this result is in line with the result of many studies in the related literature, such as the studies of Chege (2012), Yıldız (2013), Bastug (2014), and Kerubo (2014).

Conclusion

Reading comprehension is a key factor in the success of the process of learning in general since it has a profound effect on the other language skills. It helps students to develop their knowledge base in order to become successful and competent readers and improves the quality of their learning. Honestly, the relationship between students' reading comprehension and their achievement in English is entirely positive as was shown by the results of this study. Learning English as a foreign language is a challenging matter that requires more than obtaining meanings from isolated words. Students need to use a wide variety of reading comprehension skills and strategies to process appropriately what is included in the text. Frankly speaking, learning occurs only when students can understand what they read and this will be reflected on their academic success in a suitable way. Finally, of all the options available to policy makers seeking to improve EFL students' academic achievement, the most effective are those that focus on teaching students to comprehend what they read.

Recommendations

In light of the previous results, the researcher recommends the following:

1. English language instructors need to adopt new strategies for teaching reading comprehension, in order to support less successful students to improve their achievement and to master the foreign language since reading comprehension is a significant indicator of students' academic success. As a result, reading comprehension skills and strategies should be taken into consideration to enhance students' academic achievement.

2. Conducting training programs for English language instructors on how to deal with reading comprehension practices, strategies, and skills and on how to follow various methods in teaching the reading process itself in an appropriate way to enhance learners' reading comprehension which eventually affects

students' achievement positively.

3. Material developers need to design and incorporate tasks and exercises that cover a wide range of reading comprehension strategies that suit students' levels and individual differences.

4. Since research studies examining the link between students' reading comprehension and their achievement in English are rare, further research in this area is in need particularly in response to the ever changing needs of students.

References

- Baker, L., & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly*, 34(4), 452-477. doi: 10.2307/748216
- Bani A. M., & Bsharah, M. (2014). The effect of speed reading strategies on developing reading comprehension among the 2nd secondary students in English language. *English Language Teaching*, 7(6), 168-174. ISSN: 1916-4742
- Bastug, M. (2014). The structural relationship of reading attitude, reading comprehension and academic achievement. *International Journal of Social Sciences and Education*, 6(4), 931-946. ISSN: 2223-4934
- Bhlool, A. A. (2013). *The effect of differentiated instruction strategy on developing ninth graders' English reading comprehension skills at Gaza UNRWA schools* (Published Master's thesis, The Islamic University of Gaza).
- Bright, G., & McGregor, P. (1978). *Teaching English as a second language*. London: Longman Publisher.
- Carson, B. (2000). *Gifted hands*. London: Longman Publisher.
- Chege, E. W. (2012). Reading comprehension and its relationship with academic performance among standard eight pupils in rural Machakos (Unpublished Doctoral dissertation, Kenyatta University).
- Duke, N. K., & Pearson, P. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction?* (3rd ed.). International Reading Association. Retrieved on June 9, 2016, from <http://www.learner.org/workshops/teachreading35/pdf/Dev>
- Grabe, W., & Stoller, L. F. (2002). *Teaching and researching reading*. London: Pearson Education Longman. ISBN: 0-582-36995-9
- Grimm, K. J. (2008). Longitudinal associations between reading and mathematics achievement. *Developmental Neuropsychology*, 33(3), 410-426.
- Hijazi, D. (2012). Difficulties Jordanian non-English major university students face while learning English as a foreign language: A student perspective. *Journal of the College of Education, Aswan University*, 26, 29-54.
- Hoffman, C. (2001). Towards a description of trilingual competence. *International Journal of Bilingualism*, 5(1), 1-17.
- Kerubo, O. (2014). *Correlation between reading comprehension practices and academic performance: A case study of class three pupils in Westlands sub-county, Kenya* (Published MA Thesis, University of Nairobi, Kenya).
- Keskin, H. K. (2013). Impacts of reading metacognitive strategies and reading attitudes on school success. *International Journal of Academic Research Part B*, 5(5), 312-317.
- Kolawole, C. O. O. (2009). The state of reading in selected secondary schools in Oyo State, Nigeria. *An International Multi-Disciplinary Journal*, 3(1) 388-398.
- Lawal, R. A. (1997). Mathemagenic behavior in the Nigerian reading comprehension class. In E. A. Abe (Ed.), *Literacy and Reading in Nigeria* (pp. 397-382). Nigeria: NERDC (Nigerian Educational Research and Development Council).
- Lerkanen, M. K., Rasku-Puttonen, H., Aunola, K., & Nurmi, J. E. (2005). Mathematical performance predicts progress in reading comprehension among 7-year olds. *European Journal of Psychology of Education (EJPE, Instituto Superior de Psicologia Aplicada)*, 20(2), 121-137.
- McCardle, P., & Hoff, E. (2006). *Childhood bilingualism: Research on infancy through school age*. Clevedon: Multilingual Matters.
- Pardo, L. S. (2004). What every teacher needs to know about comprehension. *The Reading Teacher*, 58(3), 272-280. doi: 10.1598/RT.3.5
- RAND Reading Study Group. (2002). *Reading for understanding: Toward a research and development program in reading comprehension*. Santa Monica, CA: Office of Education Research and Improvement.
- Reed, D. K., Petscher, Y., & Truckenmiller, A. J. (2016). The contribution of general reading ability to science achievement. *Reading Research Quarterly*, 52(2), 253-266. doi: 10.1002/rrq.158

- Souriyavongsa, T., Zainol A. M., Sam, R., Lai M. L., & Britto, I. (2013). Investigating learning English strategies and English needs of undergraduate students at the national university of Laos English language teaching, *6*(10), 57-71. ISSN: 1916-4742
- Taboada, A., Tonks, S. M., Wigfield, A., & Guthrie, J. T. (2009). Effects of motivational and cognitive variables on reading comprehension. *Reading and Writing: An Interdisciplinary Journal*, *22*(1), 85-106.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- Tonjes, M. J., & Zintz, M. V. (1991). *Teaching reading, thinking, study skills in content classrooms* (3rd ed.). Dubuque, IA: Wm. C. Brown.
- Tsai, J. L., Lee, C. Y., Hung, D. L., & Tzeng, O. J. L. (2001, August). Eye movement guidance without word space: The preferred landing location in reading Chinese text. Paper presented at the 11th European Conference on Eye Movements, ECEM11, Turku, Finland.
- Yıldız, M. (2013). The role of the reading motivation, reading fluency and reading comprehension on Turkish 5th graders' academic achievement. *Turkish Studies-International Periodical for the Languages, Literature and History of Turkish or Turkic*, *8*(4), 1461-1478.