

*An investigation of the Effects of Oral Reading  
Fluency on the Comprehension of Iraqi Learners  
at the University Level*

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**Abstract**

Extensive research on reading in English as a first language has shown the critical role fluency plays in successful text comprehension. Most research indicate that good reading ability is virtually impossible in the absence of fast and accurate word recognition skills and reading fluency. Contrary to the increasingly important role reading fluency has been given in English L1 settings, it has attracted scant attention in L2 and FL settings because it is expected to grow naturally as reading skills develop.

Some preliminary studies on reading fluency in L2 or FL contexts have directed the attention of researchers and educators to the issue of whether reading fluency plays a crucial role in successful text comprehension. This study deals with the comparative relationship between students' abilities in oral reading fluency (ORF) and their comprehension of text. It deals with a serious problem facing students of English at the university level in Iraq. It is a common observation that these students are slow readers. This, in fact, has a very negative effect on their academic achievement. It is a stumbling block in the way of doing their assignments and performing their academic tasks. It also deals with the development of the reading ability at the first three stages at the university level.

## دراسة في تأثيرات سلاسة القراءة الشفهية على إدراك الطلبة العراقيين في الجامعة

### الخلاصة :

لقد أظهرت الدراسات الواسعة حول القراءة في اللغة الانكليزية الأم الدور الخطير الذي تلعبه سلاسة القراءة في الفهم الصحيح للنص. لقد بينت معظم البحوث أن قابلية القراءة الجيدة غير ممكنة عمليا في غياب القابليات السريعة والدقيقة في إدراك الكلمات و سلاسة القراءة. و بخلاف ما نالته سلاسة القراءة من اهتمام متزايد في محيط اللغة الانكليزية الأم، فقد جذب هذا الموضوع الاهتمام الضئيل في محيط اللغة الانكليزية كلغة أجنبية أو لغة ثانية لان من المتوقع أن تتقدم سلاسة القراءة بصورة طبيعية مع تطور قابليات القراءة.

لقد وجهت الدراسات التمهيدية حول سلاسة القراءة في محيط اللغة الانكليزية كلغة ثانية أو أجنبية اهتمام الباحثين و المتقنين إلى مسألة فيما إذا كانت لسلاسة القراءة الدور الحاسم في الفهم الصحيح للنص

تبحث هذه الدراسة في العلاقة المقارنة بين قابليات الطلاب في سلاسة القراءة الشفهية و فهمهم للنص. يدرس هذا البحث مشكلة خطيرة تواجه طلاب اللغة الانكليزية من العراقيين في الجامعة. فمن الملاحظ بصورة عامة أن هؤلاء الطلاب بطيئي القراءة. و لهذه القراءة البطيئة في الواقع مردودات سلبية على تحصيلهم الأكاديمي. فهي عائق في طريق أداء فروضهم الدراسية وانجاز واجباتهم الأكاديمية. كما تبحث الدراسة في تطور قابلية القراءة في المراحل الثلاثة الأولى من الجامعة.

### 1.Introduction

Difficulties in reading comprehension affects students achievements and their future occupational opportunities. Until recently, many researchers assumed that bottom-up skills ( word recognition and decoding) were the main reasons for difficulty with reading comprehension. Indeed, various independent researchers have demonstrated that if a reader is seriously deficient at decoding and recognizing words, this will necessarily impede successful comprehension. Furthermore, it is not just their accuracy in bottom-up skills that is important but also their efficiency and reading speed as well. Slow word reading increases demands placed on other processes, such as working memory, which in turn poses difficulties for comprehending connected text. (Cutting et. al., 2009:35)

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It is necessary to have a remarkable ability to read quickly. Hyland(1990:14), in this respect, emphasizes that many foreign language students are suffering from their slow reading speed and cannot catch up with their assignments. Hook and Jones (2002:8)affirm that lack in fluency in poor readers is evidenced by their slow, halting and inconsistent reading rate; poor phrasing; and inadequate intonation patterns. Not only good readers read fluently with adequate speed, but when they read aloud, they also use appropriate phrasing, intonation and their oral reading mirrors their spoken language.

Many researchers agree that reading fluency and comprehension is the cornerstone of effective reading(Dechant and Smith, 1977:276;Talada, 2007:3) Al -Dahiry(1977:36-7) affirms that reading comprehension and reading speed are interrelated. He adds that this relation is complex and is influenced by the following factors: purpose(s) of reading, level of difficulty of texts, and the content of the reading text.

The present study is based on the hypothesis that the academic stage factor plays a vital role in improving and developing the interrelation between reading fluency and text comprehension. This study is organized as follows. Section two exposes the interrelation between reading fluency and text comprehension. The importance of oral reading fluency is highlighted in the following section. The third section gives theoretical support for developing reading fluency. Section four reviews the available literature concerning the reciprocal relationship between reading fluency and comprehension. The experimentation conducted in this study to check the validity of the hypothesis upon which the work is based is given in the fifth section. The discussion of the results is manifested in the sixth section. The last two sections are devoted to the conclusions derived from the experiment and the recommendations that the researchers believe to be necessary in improving the students' academic as well as non-academic performance.

## **2- Reading Fluency and Comprehension**

In general, reading comprises two main skills: fluency and comprehension. There is a close relation between the two skills. That is, reading fluency without sufficient comprehension cannot be considered as reading(Ali,1995:2). Reading comprehension is a complex process which comprises the successful or unsuccessful use of many abilities. A reader must be able to recall information

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after reading a piece of information. Speed of reading is an important factor which can affect both the quantity and the quality of comprehension (Wainwright, 2001:43). In addition, most research indicates that good reading ability is virtually impossible in the absence of fast and accurate word recognition skills and reading fluency.(Taguchi,2004:1)

Fluency is realized as the rapid and accurate reading of a connected text that results when orthographic, phonological, and semantic processes are retrieved rapidly and are high in quality, leading to an effective speed of reading so that comprehension occurs (Perfetti,1985:118). Meyer and Felton(1999:284) defined fluency as " the ability to read connected text rapidly, smoothly, effortlessly, and automatically with little conscious attention to the mechanics of reading, such as decoding".

Fluency consists of both accuracy and automaticity in word recognition as well as the appropriate use of prosodic and syntactic knowledge for better comprehension of text (Taguchi et al.,2006:1; Bashir and Hook,2009:197). That is, fluent readers are able to identify words in text quickly and accurately with a minimal amount of attention. Word recognition is done efficiently and effortlessly and consequently, readers can read connected texts silently or orally with speed and good comprehension. In addition, fluent readers are able to read aloud with appropriate phrasing and expressiveness. Background knowledge and higher-order comprehension skills, such as predicting, making inferences and monitoring ongoing understanding also influence readers' comprehension performance.( Taguchi et.al.,2004:1;Taguchi et. al.,2006:1-2)

Lower-level processing skills are particularly needed for second language(L2) or foreign language(FL) readers. Because of inefficiency in these skills, reading in a second or foreign language is usually a slow , laborious process. (Ibid:2)

When a reader lacks fluency or laboriously recognizes words, the reader's ability to comprehend a text is significantly impacted. Fluent readers enjoy the reading process and thoroughly understand encountered texts. As one becomes more fluent in the reading process, mental energy can be devoted to the task of comprehending. ( Talada,2007:19)

Hill (1981:275)mentions de Leeuw's categories for the reading speeds in English language as the native language as follows:

Table (1): Scale of speeds in words per minute

170-199	Very slow
200-229	slow
230-249	average
250-299	Above average
300-349	Medium fast
350-449	fast
450-549	Very fast
550-650	Exceptionally fast

### **2.1-The Importance of Oral Reading Fluency**

Oral reading from the standpoint of the major mental and physical processes involved is a more comprehensive experience than silent reading because it involves silent reading plus oral expression(Al-Dahiry,1980:43). Swalm (1972:207)affirms that oral reading is superior because the student is forced to pay closer attention to words. The reader not only sees the word but he hears the word when it is read aloud.

Talada (2007:5) agrees that oral reading fluency is tremendously important because reading aloud allows students to read with appropriate intonation while comprehending the text they encounter. Instructional practices that utilize the principles of oral reading strategies allow students to develop in their abilities to read fluently while thoroughly understanding the text.

### **3.Automaticity Theory and Verbal Efficiency Theory: Theoretical Support for Developing Reading Fluency**

The critical role fluency plays in efficient and successful reading is based upon two theories of reading called Automaticity Theory (AT)( LaBerge and Samuels,1974; Samuels,1994) and Verbal Efficiency Theory (VET)(Perfetti, 1985,1988). Both theories highlight the harmful effects of inefficient skills on comprehension and maintain that if word reading demands too much attention, little remains for higher level comprehension (Walczyk and Griffith-Ross, 2007:560)

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AT suggests that part of the reading process must be done with a slight amount of attention to achieve successful reading comprehension. Reading is a complex process, it involves in the bottom letter feature extraction, orthographic segmentation, and phonological coding. The end result of these processes is lexical access or word recognition in which readers identify the meanings of words in texts. Beyond lexical access is comprehension of sentences, paragraphs and entire passages. (Taguchi et. Al.,2006:2-3).

When a reader lacks fluency or laboriously recognizes words, the reader's ability to comprehend a text is significantly impacted. Therrien (2004:252) affirms that poor readers often spend a great deal of their cognitive resources on decoding and have little left for comprehension. Fluent readers, on the other hand, enjoy the reading process and thoroughly understand encountered texts. They are able to put forth less conscious effort and complete the task automatically. This automaticity and lack of conscious effort are essential if comprehension is to occur at an effective rate.(Talada,2007:19-20; Gorsuch and Taguchi,2008:255)

VET expands the notion of automaticity beyond lower-level decoding processes. It suggests that higher-level post lexical reading processes, such as resolving anaphors, integrating propositions, using basic cognitive and meta cognitive strategies, and activating relevant background schemas, can also be automatized through extended practice (Taguchi et. al., 2006:3; Gorsuch and Taguchi,2008:255). The term 'verbal efficiency' refers to the degree to which readers' subcomponents of reading are exercised with speed and accuracy. It is theorized that the more efficient lower-level subcomponents reading processes are, the more attentional resources are available for higher-level subcomponents of reading by ensuring better quality of information transmission from lower to higher-level subcomponent processes. In other words, if readers are quick and accurate in identifying words, they will have more attentional resources for executing resource-demanding reading comprehension.(Taguchi et. al., 2006:3)

So both theories emphasize the critical role reading fluency plays in successful reading.

#### **4.Literature Review**

Research on English as a first language gives the evidence that there is a reciprocal relationship between reading fluency and comprehension. Talada (2007) tested the oral reading fluency and text comprehension relationship for second and third grade population at a private, Catholic elementary school in Elmira, New York. She finds out that a reciprocal relationship exists between the two that allows one to comprehend more thoroughly as one reads more fluently. This is due to the fact that one's brain is more capable in processing text meaning when one is able to read fluently.

Al-Qaisi(1984:7)studied the development of reading fluency in Arabic. For the purpose of his research he chose 1200 pupils randomly from 40 intermediate schools in Baghdad. He attempted to examine the influence of the grade on the pupils ' reading fluency. Comparing the results of the first, second and third grades concerning reading fluency, it appeared that the rate of reading is 120 words per minute(w.p.m., henceforth) for the first grade, 130 w.p.m. for the second grade, and 144 w.p.m. for the third. Significant differences were found in progression from the first to the third grade.

Whereas studies on the speed of reading in English as a foreign language or second language indicate that the topic is rather complex. Ali (1995) studied the silent reading speed of Iraqi learners at the university level. The subjects of the study were the first year students at the College of Arts. His findings are : the students are slow readers and they lack markedly the fundamentals of efficient reading.

In his study of oral reading fluency and text comprehension of Arabic/ Hebrew (L1)-English (L2) readers ,Saiegh-Haddad (2003) finds out that oral reading fluency and reading comprehension are significantly correlated. His findings demonstrate the importance of oral reading fluency in adult L2 reading comprehension.

#### **5. The Experimental Design**

An experiment was carried out to examine English foreign learners' reading fluency to see whether there is a real correlation between oral reading fluency and text comprehension. The development of the oral reading fluency throughout the stages was also examined.

### **5.1 Subjects**

The subjects selected as the sample group in this study are thirty Iraqi students from the Department of English, College of Education, University of Basrah. Ten students were chosen from the first stage, ten from the second and ten from the third. The best ten students were chosen from every stage in order to determine the level of the sample. Factors such as age or sex were overlooked in this study.

### **5.2 Data**

The subjects were asked to read the passage "Electric Motors" (Green, 1969:10). It consists of three paragraphs; 199 words. After reading the passage the subjects had to answer ten questions divided into two groups. The first group examines the students' ability in word identification, whereas the second tests their comprehension of the text.

### **5.3 Test Administration**

The test was administered in two separate rooms in the Department of English, College of Education, University of Basrah. In the beginning, each subject was asked to read the passage aloud in the first room. Then, the subject was given the paper of the questions to be answered in the second room. The subjects' reading was recorded on a tape recorder (type: Gosonic:GSN-S26). The subjects were informed that the test is carried out for academic and research purposes. It had nothing to do with their evaluation in English. The test was carried out on 24March 2010.

## **6. Analysis of Results**

After deciding the number of words read per minute for every student in the three stages and after getting the scores of the subjects in the comprehension test, our first aim was to investigate the degree of the subjects' performance by getting the effective reading rate by multiplying the number of words read per minute by the comprehension score(Wainwright, 2001:42). The following table illustrates the performance of the subjects in the first stage



Table (2): First Stage Subjects' Performance in the test

Subject	Total time for reading	Words/ min	Comprehension score	Effective reading rate
1	02:06	69	7	483
2	02:33	56	8	448
3	02:33	56	5	280
4	02:20	69	5	345
5	03:00	55	6	330
6	02:30	69	4	276
7	02:05	80	7	560
8	03:03	56	6	336
9	02:10	69	6	414
10	02:40	67	5	335

Mean	380.7
STD	92.66793

The very slow native speaker of English reads 177-199 words per minute, whereas the best reading of the first stage subjects is 80 w.p.m., as shown in the table. This gives the evidence that Iraqi learners of English are very slow readers. The mean value of the effective reading rate for the first stage is 380.7 as shown in table(2).

The subjects of the second stage performed better than those of the first stage. This is clarified in table (3).

Table (3): Second Stage subjects' Performance in the test

Subject	Total time for reading	Words/ min	Comprehension score	Effective reading rate
1	01:44	108	7	756
2	02:00	94	6	564
3	02:15	68	6	408
4	01:30	114	6	684
5	02:00	101	8	808
6	02:00	75	5	375
7	01:30	132	7	924
8	01:35	114	7	798
9	01:30	126	4	504
10	02:20	64	4	256

Mean	607.7
STD	219.7423

The table shows that the second stage subjects are much more fluent than the subjects of the first stage. Subject 7 reads 132w.p.m., whereas the best reading of the first stage reaches 80 w.p.m. The comprehension scores of the second stage are also higher than that of the first stage. The mean value of the effective reading rate for the second stage is 607.7.

Third stage subjects, on the other hand, are not so different in performance than those of the second stage. This is clearly shown in Table (4).

Table (4): Third Stage Subjects' Performance in the test

Subject	Total time for reading	Words /min	Comprehension score	Effective reading rate
1	02:00	84	6	504
2	01:45	96	7	672
3	01:50	90	8	720
4	01:29	122	7	854
5	01:50	108	6	648
6	01:30	126	6	756
7	02:02	72	8	576
8	01:03	122	6	732
9	02:00	90	7	630
10	01:44	104	5	520

Mean	661.2
STD	109.4438

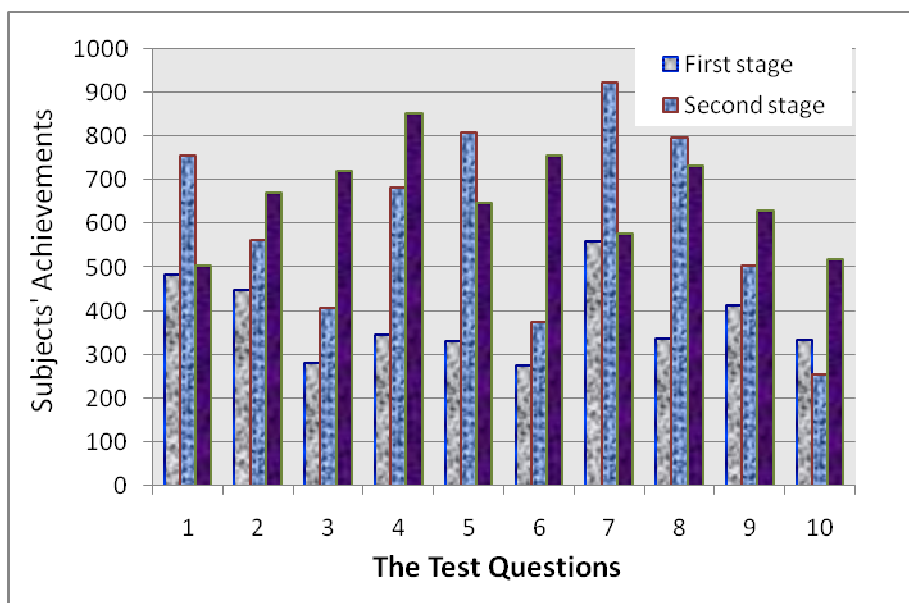
Third stage subjects read with higher fluency than first stage and second stage subjects. The difference in performance between the first stage, on the one hand, and the second and the third stages, on the other, is found to be significant. This was statistically proved by the ANOVA(Analysis of variance) Test. There was no significant difference in performance between the second and the third stages, on the other hand, because they achieved nearly the same in the whole test. The following table illustrates these results:

Table (5): The Correlation of the Three Stages' Effective Reading Rates

grade	1	2	3	l.s.d.*
Effective Reading rate	381.	608	661.	139.0

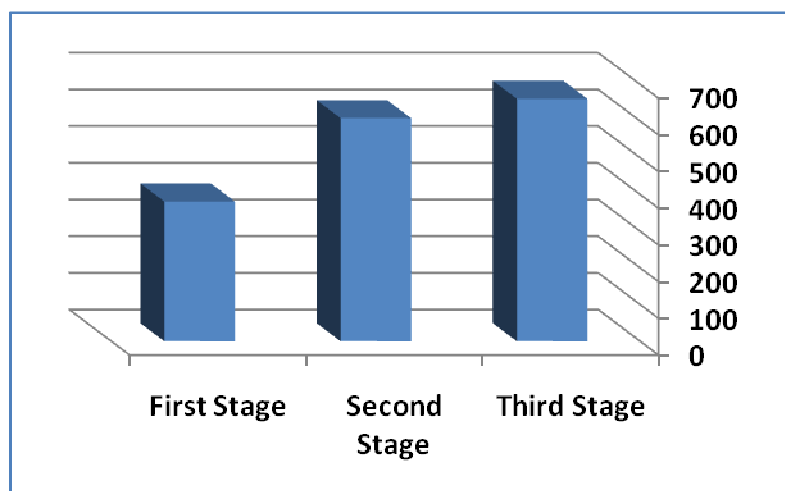
\* l.s.d :Least satisfactory deviation

The development of the effective reading rate from the first stage to the second was found to be significant because the difference between the first stage effective reading rate, i.e. 381, and the second stage effective reading rate, i.e. 608, which is 227 is higher than the least satisfactory deviation, i.e. 139. Whereas this development was found to be insignificant between the second and the third stages, because the difference between the two effective reading rates, i.e. 53 is less than the least satisfactory deviation, as shown in the above table. The second and the third stage subjects proved to be more successful in their oral reading fluency and text comprehension than the first stage subjects. The following Histogram illustrates the achievements of each subject in the three stages:



Fig(1):Histogram of subjects' Achievements in the Test Questions

So it is evident that reading fluency and text comprehension develop throughout the stages. The following Histogram illustrates this result .



Fig(2):Histogram of subjects' Achievements in the Whole test

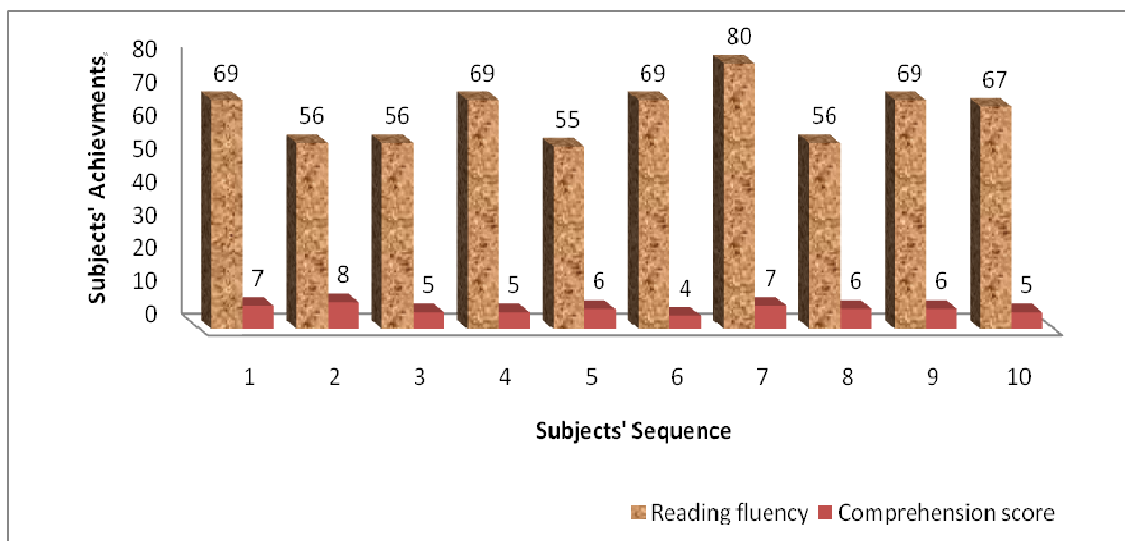
In concern with the correlation of oral reading fluency and reading comprehension, the ANOVA Regression Test was used to examine the significance of the relation. The following table illustrates the results:

Table(6):The correlation of Oral Reading Fluency and Text Comprehension for First Stage Subjects

<i>Significance F</i>	<i>F</i>	<i>MS</i>	<i>SS</i>	<i>df</i>	
0.893855585	0.019	1.500775	1.500775194	1	Regression
		79.1124	632.8992248	8	Residual
			634.4	9	Total

In the above table, the tabulated F ( 0.019) is lower than the significant F (0.893855585), so the correlation between oral reading fluency and reading comprehension is insignificant. This is due to the poor reading of the first stage

subjects. Their reading is very slow, full of pronunciation errors and they stop everywhere in the passage. The following histogram illustrates the results.



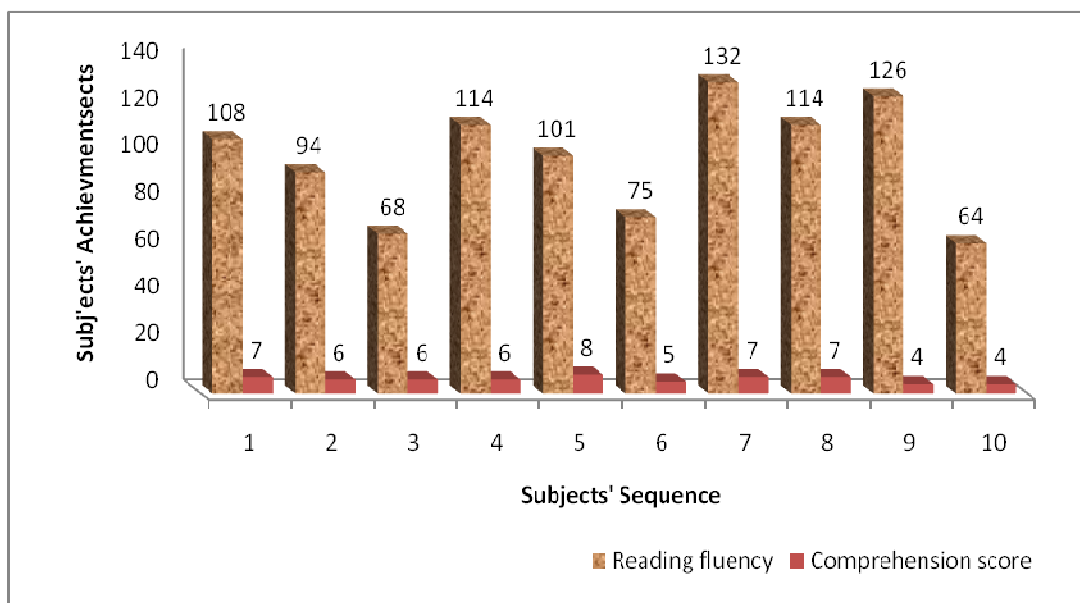
Fig(3):Histogram of First Stage Subjects' Achievements in the Test

Second stage subjects, on the other hand, performed better in the test and the correlation between oral reading fluency and reading comprehension was found to be statistically significant because tabulated F (1.13374) is higher than significant F(0.31805844). This is shown in table( 7).

Table(7):The correlation of Oral Reading Fluency and Text Comprehension for Second Stage Subjects

Significance F	F	MS	SS	df	
0.31805844	1.13374	637.563	637.5625	1	Regression
		562.355	4498.8375	8	Residual
			5136.4	9	Total

So there is a correlation between oral reading fluency and text comprehension in the performance of the second stage subjects. This is clarified in the following histogram.



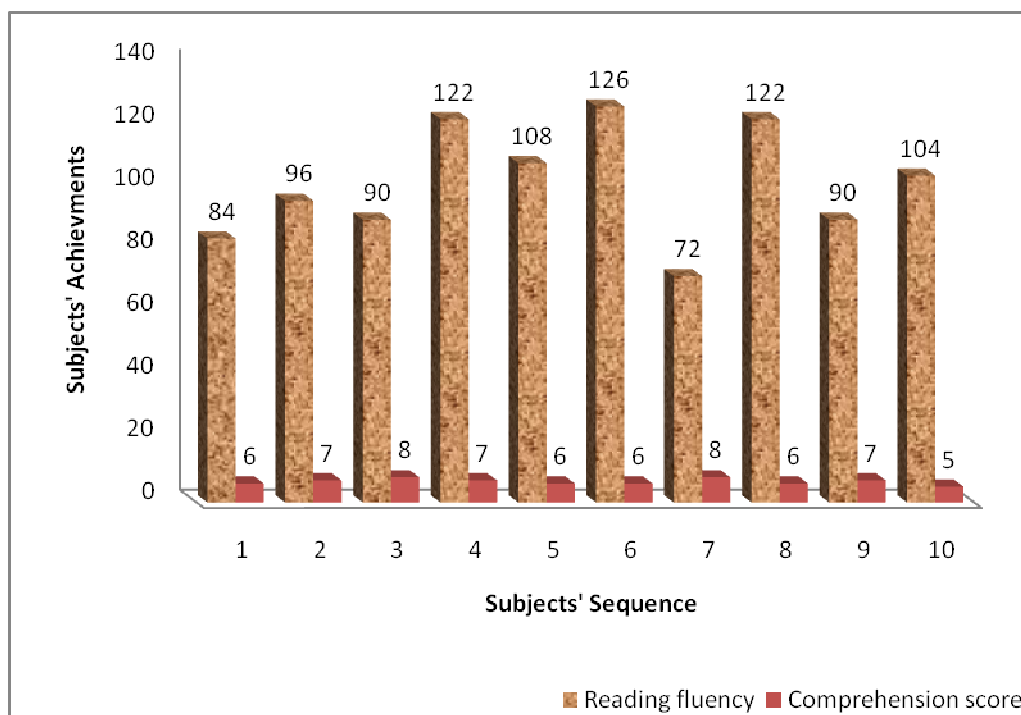
Fig(4):Histogram of Second Stage Subjects' Achievements in the Test

Third stage subjects were also good in performance. The correlation between oral reading fluency and text comprehension was also found to be statistically significant because tabulated  $F$  (2.8100156) is higher than significant  $F$ (0.132203123). Table( 8) illustrates the results.

Table(8):The correlation of Oral Reading Fluency and Text Comprehension for Third Stage Subjects

Significance $F$	$F$	$MS$	$SS$	$df$	
0.132203123	2.8100156	769.54286	769.5428571	1	Regression
		273.85714	2190.857143	8	Residual
			2960.4	9	Total

Oral reading fluency and text comprehension were correlated in the achievements of third stage subjects. Histogram (5) illustrates this result.



Fig(5):Histogram of Third Stage Subjects' Achievements in the Test

## **7.Discussion**

The analysis of the results affirms that oral reading fluency and text comprehension are significantly correlated except for the first stage. In addition, oral reading fluency and text comprehension develop significantly throughout the stages, especially in concern with the development from the first stage to the second. The development from the second stage to the third is insignificant because the subjects of the two stages are not so different in performance.

It is true that the subjects of the three stages are slow readers but first stage subjects are really the slowest. They lack the proper fluency for reading. Their reading is full of pronunciation errors ;they give prominence to nearly every word in the passage; they misuse tones and stop after every word or two.

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All the subjects of the first stage committed different types of errors in the ten questions of the test. The first five questions tested the subjects vocabulary knowledge of the passage, whereas the other five examine the subjects comprehension of the text. Only two subjects succeeded in identifying all the words. The words 'popular' and 'connected' received two incorrect answers for each. The words 'ideal' and 'unsuitable' received four incorrect responses. Whereas three subjects fail to know the meaning of 'fairly silent'.

The subjects of the second and third stages performed better than the first stage because they committed less errors in identifying words. All the subjects succeeded in identifying the meaning of 'connected'. Only one subject of the second stage failed to recognize the meaning of 'popular', whereas all the subjects of the third stage succeeded in identifying this word. The word 'ideal' was misunderstood by one subject of the second stage, while two subjects of the third stage fail to understand the meaning of the word. Four subjects of the two stages fail to identify 'unsuitable'. The word 'fairly silent' received only three correct responses from the two stages. This similar achievement emphasizes the insignificant difference between the two stages.

The subjects of the three stages performed differently in concern with the comprehension questions. The first question which examines whether the subjects understand that the electric motor is certainly one of the most useful modern inventions, received eight correct responses out of ten by the first stage subjects. Whereas five of the second stage subjects succeeded in performance. On the other hand, all the third stage subjects succeeded in answering this question.

Only two subjects of the first stage succeeded in answering the second question , i.e. what razors are used for. On the other hand, four of the second stage subjects succeeded in performance. Whereas two of the third stage proved to be successful.

The third question, which asks whether the electric motor is better than the petrol engine or the steam engine, received six correct responses from the first stage subjects. Second stage subjects, on the other hand, made five correct responses. Whereas six subjects of the third stage succeeded in answering this question.

All the subjects of the first stage except one failed to understand question four which examines whether the electric motor wears out slowly because few of its parts move. On the other hand, only two subjects of the second stage succeeded



in performance. Whereas one subject of the third stage succeeded in answering this question.

Three of the first stage subjects failed in the fifth question which asks why the electric motor is not good for motor cycle. Similarly three subjects of the second stage also failed in answering this question. Whereas all third stage subjects succeeded in performance.

The effective reading rates develop throughout the stages. The effective reading rate is the combination of reading speed and comprehension score. The least effective reading rates were those of the first stage subjects, as shown in histogram(1). Subject No.6 failed in the test. Her score was 4 and she read 69 w.p.m. Her reading was boring and doesn't encourage to be listened to because it is full of pronunciation errors in addition to the monotone she read with. She took 4 because she failed to answer two of the word recognition questions and four of the comprehension questions. Subject No.2, on the other hand, achieved the highest score, i.e. 8 and read 56 w.p.m. Although she is not a fluent reader she got the highest score. She is a hesitant reader. She pauses between words and repeated some words. Dark/l/ was pronounced in every word including 'l'. So both subjects were not fluent although subject No.2 succeeded in the test and subject No. 6 failed. Generally speaking, although most of the first stage subjects succeeded in the comprehension test, they lack the proper fluency important for reading. This, as a result, reflects their poor abilities in speaking. They are very slow readers; they nearly stop after every word; they mispronounce many words, such as efficiency, razors, wear, undoubtedly, sewing, etc. In addition, they misplace stress and commit many tone errors. This explains why there is no correlation between reading fluency and comprehension in the performance of the first stage subjects.

Second stage subjects, on the other hand, performed better than first stage subjects. Their effective reading rates are higher than those of the first stage, as illustrated in histogram(1). Two subjects only failed in the test ; Subject No.9 and 10 got four out of ten. Subject No.9 failed in all the comprehension questions and one of the word recognition questions. Subject No.10, on the other hand, failed in three of the word recognition questions and three of the comprehension questions. Subject No.10 read 64 w.p.m. Her reading was full of pronunciation errors; she gave prominence to nearly every word in the passage; she repeated some words; and she lacked the knowledge of the correct use of

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tones. Subject No.9 read 126w.p.m. Her reading was better than the former although there were some pronunciation and tone errors. Subject No.5 got the highest score,i.e.8 and read 101 w.p.m. She failed only in two of the comprehension questions. Her reading was better than the above two although she committed few pronunciation errors and repeated some words. Subject No.3 read 68 w.p.m. and got 6 out of 10, subject No.6 read 75 w.p.m. and got 5 and subject No.2 read 94 w.p.m. and got 6. These subjects were slow readers; they stopped wherever commas were there and gave prominence to almost every word in the passage. On the other hand, subject No 1 read 108 w.p.m., subject No.8 read 114 w.p.m. and subject No. 7 read 132 and they all got 7 out of 10. These students were better than the others because they committed less errors while reading the passage. Most of their errors were those of pauses and giving emphasis to many words in the passage. These results affirm that there is correlation between oral reading fluency and text comprehension in the performance of the second stage subjects.

Third stage subjects, on the other hand, were much better in performance than the first stage and the second stage subjects. All the subjects succeeded in the comprehension test and got high effective reading rates. Subjects No.3 and No.7 got the highest scores,i.e.8. and read 90 and 72 w.p.m. respectively. Although these rates are slow but they are better than those of the first stage subject who got 8 and read 56 w.p.m. The above two readers of the third stage were slow readers because they stopped many times while reading and committed some pronunciation errors and tone errors. Subject No.3 failed only in the second of the word identification questions and the fourth of the comprehension questions. Subject No. 7, on the other hand, failed only in the second of the word identification questions and the second of the comprehension questions. The highest reading rates were those of subjects No 4, 8 and 6. Subjects No. 4 and 8 read 122 w.p.m. and got 7 and 6 respectively. Whereas subject No.8 read 126 w.p.m. and got 6 out of 10. These students are much better than the first stage students though there were some pauses here and there in addition to the few pronunciation errors they committed.

Consequently, there is a correlation between oral reading fluency and text comprehension in the performance of the third stage subjects. Generally speaking, second stage subjects and third stage subjects were much better in their oral reading fluency than the first stage subjects. That is why there is a significant correlation

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between oral reading fluency and text comprehension in the performance of the second and third stage subjects.

### **8. Conclusions**

Out of the above discussion, one can conclude the following:

1-The academic stage factor does play a vital role in developing the interrelation between reading fluency and text comprehension. This suggests, in turn, that the hypothesis of the present study is accepted.

2-There is a reciprocal relationship between oral reading fluency and text comprehension in the achievement of the second and the third stages. This correlation is lost in the first stage because of their poor reading.

3-The language of the text to be read and comprehended, as regarding its clarity and structural simplicity, plays an important role in students achievements as manifested in their reading fluency and text comprehension.

4-The topic of the text in question also affects students' performance. Generally speaking, topics that are not quite culture- specific can facilitate students' comprehension.

### 9.Recommendations:

In the light of the above stated conclusions, the researchers recommend the following:

1-The reading skill must be emphasized in all of the four academic stages, and the number and degree of complexity of the text to be read need to be increased gradually.

2-Oral reading should be encouraged during classes.

3-Students should be exposed to different texts having different levels of complexity.

4-Extensive reading is so important to help the students achieve the appropriate level of reading fluency.

5-Listening to the recordings of English native speakers is seriously important to increase the sensitivity of the foreign learners towards English and achieve the native-like level in reading fluency.

## Appendices

### Appendix 1

The passage of the test:

#### Electric Motors

The electric motor is undoubtedly one of the most helpful modern inventions. It is used in factories to drive machinery, for electric trains, for trolley-buses and to power such everyday things as food mixers, polishers, vacuum cleaners, record players, drills, sewing machines and electric razors.

What makes this sort of motor so popular? One reason is its efficiency. Figures show that it is much more efficient than steam engine, or petrol engine. It is simple to work; it does not shake; it is fairly silent; it has few moving parts, and therefore gets little wear and tear. It can be easily started, speeded up, slowed down, and stopped. In fact for most purposes it is ideal.

The electric motor has one great disadvantage; it has to be supplied with electricity. It must either be connected to an electric supply line or to a very heavy battery. This is why the electric motor is unsuitable for cars, motor cycles and so on. But many machines do not need to be moved about, or at any rate they can be attached to a power point. For all these machines the electric motor can be used.

Appendix 2

The questions of the test

Q1/ Give the right meaning of the following words:

- 1- popular (a)cheap (b) noisy (c)known by many
- 2-fairly silent (a)rather noisy (b)not very noisy (c)completely silent
- 3-ideal (a)very good (b)perfect (c)content
- 4-connected (a) joint (b)built (c)stretched
- 5-unsuitable (a)just what you want (b)what people don't like  
(c)not what you need

Q2/Give the right answer:

1-The electric motor is:

- (a) certainly one of the most useful modern inventions
- (b)definitely the most useful modern invention
- (c)possibly one of the most useful modern inventions

2- Razors are used for:

- (a)cutting hair on the head
- (b)removing hair from the face
- (c)cutting grass

3-It can be shown mathematically that:

- (a) the electric motor is not so efficient as the petrol engine
- (b)the electric engine is more efficient than either the steam or petrol engine
- (c)the petrol engine is inefficient compared with the steam engine

4-(a)the electric motor wears out slowly because few of its parts move

- (b)a few of the parts of the electric motor move so it wears out rather fast
- (c)the electric motor doesn't suffer from wear and tear because it starts and stops easily

5- electric motors are no good for motor cycle because

- (a) they would not work fast enough
- (b) they would not make enough noise
- (c) the battery would have to be too big

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