



MANSOURA UNIVERSITY  
FACULTY OF Education



## **Comprehension Skills and Motivation of Primary Stage Pupils**

*By*

**Basma El-Sayed Abd El-Fattah Mohamed**  
*A teacher of English at Salem Median Official Language School*

### *Supervisors*

**Dr. Ali Abdul Samea Qoura**

*Professor of curriculum & instruction  
(TEFL)*

**Dr. Rehab Gohar**

*Associate Professor of curriculum &  
instruction (TEFL)*

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## Comprehension Skills and Motivation of Primary Stage Pupils

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### **Abstract**

The present study aimed at developing story reading comprehension (SRC) skills by using mental imagery strategy. The study adopted a quasi-experimental design employing two groups (one experimental group and one control group). The two instruments used were a story reading comprehension test and a motivation scale. The sample consisted of 60 pupils from sixth grade primary school of Salem Madian Official Language school, in Dakahlia Governorate, where 30 pupils represented the first experimental group, and the other 30 pupils represented the control group. The mental imagery strategy was administered to the experimental group for six weeks. Results of the study revealed that there is a statistically significant difference between the mean scores of the experimental group and the control group in the post-test of the SRC. In addition, there is a statistically significant difference between the mean scores of the pre-test and post-test of the experimental group in the overall SRC in favor of the post-test. These results showed that mental imagery strategy had a positive effect on the pupils' story reading comprehension and their motivation towards reading. finally, a number of recommendations related to the use of mental imagery strategy, reading comprehension of a story, and course design were presented .

**Keywords:** Story Reading Comprehension, Mental Imagery strategy, Primary Stage. Motivation.

### ***Introduction:***

Reading stories and novels is one of the most crucial skills in learning languages. It is a lifelong skill to be used both at school and throughout life. The more learners read, the more they interact with the text, characters, events and gain the best related values and cultural aspects as well as enjoyment. Learners need to develop not only reading what is written but also understanding what they read. Thus, the ability to read and comprehend a text is an essential skill to prepare learners as productive members in the society.

Reading comprehension is considered one of the most complex skills. Students desire to read texts and teachers want to promote and assess comprehension. Understanding the meaning of text words, numbers, and images, in print or digital form is the ultimate desired goal of reading.

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Reading comprehension's instruction and assessment are arguably the most significant outcomes of reform movements designed to improve reading curriculum and instruction or at least it ought to be (Snow, 2003).

According to Burden and Byrd (2009), there are two main factors that can affect the reading comprehension performance of learners. They include internal factors that relate to motivation and interest, and external factors that relate to teacher and material) as cited in Ermayanti,2013). If learners lack motivation and interest in the written text, their performance will be affected badly. If learners have strong background knowledge, they will be able to understand it well.

Despite the importance of reading, primary school pupils have a number of difficulties in reading. They may lack motivation and interest towards reading. Researchers have noted that investigations of student motivation might provide insights into why many students are experiencing difficulties along the path to reading competency (Wigfield et al., 2004). They may also face some difficulties in recognizing and appropriately applying background knowledge, decoding and word recognition skills. They may have limited vocabulary knowledge, and limited understandings about reading structures. Moreover, they may not identify the author's purpose or distinguish between facts and opinions.

Literacy researchers have shown that students who struggle with reading might be at risk for academic, emotional, and behavioral problems. Those who have difficulty developing reading skills often report less engagement in school, poor self-esteem, and lower motivation (Grimm, 2008; Joseph & Schisler, 2006). Those students might also be at a higher risk for dropping out of school, developing behavior problems, and having lower paying jobs as adults (Grimm, 2008; Joseph & Schisler, 2006).

Becoming a competent reader allows students to experience success in all subjects. This academic success helps students to develop confidence in their abilities as learners (U.S. Department of Education, 2003). Wigfield, Guthrie, Tonks, and Perencevich (2004) suggested that, "because reading is an effortful activity that often involves choice, motivation is crucial to reading engagement". Since children get motivated and engaged with the literary texts, they can construct mental images, create and build meaning based upon prior knowledge, and interact with the author, content and writing style. This can be achieved through mental imagery strategy. This strategy is best explained by "Dual Coding Theory". The most basic principle of DCT is that all cognition involves an intricate interplay between two great mental codes, the verbal code or language and the nonverbal code

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or imagery. It has been applied to text and can explain a great deal of the comprehension and appreciation of literary text. Language and imagery working together produce the effects we experience in evoking a text including rhetorical effects (Sadoski, 2003).

As Comprehension instruction is an attempt to teach students how to think while they read (Gersten et al 2001), reading creates mental pictures and this imagery brings more meaning to the text. Imagery seems to be the linking of cognition and affection that draws a richer meaning from the text. Hence, creating mental images can improve comprehension in three ways: Firstly, it increases the capacity of students' working memory by assimilating information from the text into larger chunks thus freeing up storage capacity in working memory. Secondly, in the process of creating images about the text, pupils are involved in making comparisons and analogies. Thirdly, imagery is a strategy that acts as an organizational tool for storing text meaning in memory. Therefore, this current study investigates the effect of using mental imagery strategy in developing pupils' story reading comprehension skills.

#### **Mental Imagery Strategy**

Imagery, as a broad concept, is derived from the word image that seems to carry a number of different meanings and collocations which cut across different disciplines including psychology and literature. According to the psychologists, mental imagery has been investigated historically and considered exclusive and specific to the field of psychology. Researchers have referred to the concept of imagery in different ways: as a phenomenal experience, as an internal representation, as a stimulus attribute, and as a cognitive strategy (Richardson as quoted in Roeckelein, 2004:1). However, Richardson defined mental imagery (as quoted in Roeckelein, 2004:120) all those quasi-sensory or quasi-perceptual experiences of which we are self – consciously aware, and which exist for us in the absence of those stimulus conditions that are known to produce their genuine sensory or perceptual counterparts, and which may be expected to have different consequences from their sensory or perceptual counterparts”.

Mental imagery has played a powerful role in literacy throughout history. Ancient philosophers believed that all cognition involved imagery. Hence, they gave imagery a prominent place in composing or comprehending discourse. However, some philosophers such as Plato dealt imagery cautiously, but he still compared cognition to literacy metaphorically. Mental imagery was central to composing in the loci method of the ancient and medieval rhetoricians. It also was central to

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reading in the ruminative practices of the medieval scholastics. On their part, Renaissance scholars and educators also believed that imagination had a central place in their world view. Furthermore, they introduced pictorial imagery and they emphasized concreteness in literacy learning. However, Romantic philosophies, educators, and literary figures emphasized natural, concrete, meaningful experiences and imaginative processes in all cognitive activity including composing and reading.

In supporting the philosophy of mental imagery, Thomas asserted the great importance of mental imagery for both memory and motivation processes as well as critical thinking and creativity. She noted that mental imagery is sometimes called visualization or “seeing one’s mind”. Harvey and Goudvis (2000:97) thought that “When we visualize, we create our own movies in our minds. We become attached to the characters we visualize. Visualizing personalizes reading, keeps us engaged, and often prevents us from abandoning a book prematurely”. However, Denis thought that mental imagery isn’t the core of thoughts but a medium for them. He believed that imagery involves a set of processes that can be energized by different levels of cognition.

This strategy is best explained by "Dual Coding Theory" and “Piaget’s theory of cognitive development”. The most basic principle of DCT is that all cognition involves an intricate interplay between two great mental codes, the verbal code or language and the nonverbal code or imagery. It has been applied to text and can explain a great deal of the comprehension and appreciation of literary text. Language and imagery working together produce the effects we experience in evoking a text including rhetorical effects (Sadoski, 2003).

This teaching approach is proper for instructing learners how to form mental images while reading literary works, especially stories. It enhances recalling the sequence of events in a chronological order. Therefore, the purpose of this study was to investigate the impact of this strategy on enhancing 6<sup>th</sup> grade primary stage pupils' story reading comprehension

#### **Review of Literature:**

#### **Mental Imagery Strategy and Story Reading Comprehension**

Ghazanfari (2009) presented his study to investigate the effectiveness of visualization in EFL learners' reading comprehension and recall of short stories. In this study, two homogeneous groups of EFL undergraduates were selected. One of them served as the experimental and the other as the control group, both studying the same short stories, and both being taught by the researcher as their instructor of the course. The experimental group

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was instructed on how to form pictures in the mind—i.e., how to visualize—before reading, while reading, and after reading a short story. The control group, however, did not receive any training with respect to imagery production and was not told to practice visualization before, while, or after reading the same texts as the experimental group did. The results indicated that the “visualizers” significantly outperformed the “non-visualizers”, i.e., the control group, on both tests.

Boreggah (2012) conducted her study to investigate the effectiveness of using a mental imagery – based program in improving the skills of reading EFL literary texts and creative thinking among first grade secondary school students. Two randomly assigned groups of students in a secondary school at Al-Khobar in K.S.A. were selected to be the experimental group (EG) and the control group (CG) of the study. Results revealed that mental imagery training had positive impact on students’ skills of reading literary texts and creative thinking. The study also calls for adopting the mental imagery strategy to improve students reading comprehension and creative thinking.

A Turkish study by Kocaarslan (2015) aimed to establish the possible relationships between reading comprehension competence, reading attitude and the vividness of mental imagery among Turkish fourth-grade pupils. Participants were fourth grade pupils, selected using convenience sampling from two different public schools in Bartın, Turkey. The research was designed as a correlational study to describe the degree to which two or more quantitative variables are related by using a correlation coefficient. The data gathering tools used in this study were (1): the Reading Comprehension Test (RCT); (2) the Vividness of Imagery Questionnaire (VIQ); (3) the Elementary Reading Attitude Survey (ERAS). Multiple linear regressions were used for data analysis. The findings revealed that reading attitude and vividness of mental imagery were significant predictors for students’ reading comprehension competencies.

Boerma (2016) examined the role of mental imagery skills on story comprehension in 150 fifth graders (10- to 12-year-olds), when reading a narrative book chapter with alternating words and pictures. A parallel group design was used for comparing his experimental book version in which pictures were used to replace parts of the corresponding text, to two control versions, i.e., a text-only version and a version with the full story text and all pictures. Analyses showed that children with higher mental imagery skills outperformed children with lower mental imagery skills on story comprehension after reading the experimental narrative. This was not the

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case for both control conditions. The results emphasize the importance of mental imagery skills for explaining individual variability in reading development.

There is a strong correlation between reading comprehension and motivation. Marsela (2017) conducted a study to investigate the relation between reading comprehension and motivation. Based on the Person Product Moment Correlation Coefficient, the result indicates fair correlation between reading comprehension and motivation. **Al Raies (2006) conducted a study to determine the impact of motivation on reading comprehension of English for pupils in primary grades in Jordan and attempted to demonstrate the relationship between motivation and reading comprehension using written- verbal test and a questionnaire. The major finding was the presence of statistically significant differences due to the interaction between sex and motivation on both verbal and written tests, in favor of female pupils with high and low motivation.**

**Pilot Study:**

In order to provide an evidence for the problem of the study, the researcher conducted a pilot study to determine pupils' reading comprehension level and their motivation. A Reading Comprehension Test (RCT) designed by the researcher was administered to a sample of twenty (20) sixth grade primary pupils from Salem Madian Official Language School and validated by EFL senior teachers and English supervisors.

***Table 1: Reading Comprehension Test Results***

No.	Reading Comprehension 'Sub-Skills	Mean	SD	Percentage
1	Distinguishing between facts and opinions	1.4	0.5	48.4%
2	Predicting new events	1.9	0.7	65.1%
3	Paraphrasing the events	1.7	0.8	59%
4	Summarizing the events	1.5	0.5	53%
	Total	6.7	1.8	56.4%

Table (1) shows that the mean score of the reading test is (6.7), which is considered an indication that the pupils need to improve their reading skills (Distinguishing between facts and opinions -Predicting new events - Paraphrasing the events- Summarizing the events ).

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**Statement of the problem:**

Based on the literature review, and results of the pilot study, the problem of the current study can be stated as follows:

Sixth year primary stage pupils *seem* to face difficulty in some story reading comprehension skills and in thinking while reading. Therefore, there is a need for utilizing mental imagery strategy to enhance story reading comprehension skills of sixth year primary stage pupils.

**Questions of the Study:**

1. What are the story reading comprehension skills necessary for sixth year primary stage pupils?
2. What is the effect of using Mental Imagery Strategy on developing sixth year primary pupils' EFL story reading comprehension skills?
3. What is the effect of using mental imagery strategy on enhancing sixth year primary stage pupils' reading motivation?

**Purpose:**

The current study aims at:

1. Investigating the effect of mental imagery strategy in developing the story reading comprehension skills of sixth year primary pupils'
2. Investigating the effect of mental imagery strategy in developing the sixth-year primary stage pupils' motivation.

**Significance of the Study:**

It is hoped that the present study would contribute to:

1. Providing mental imagery training to improve pupils' story reading comprehension skills.
2. Raising the awareness of EFL teachers about the necessity of applying and training the pupils in the strategy of mental imagery
3. Enriching the field of research on mental imagery training and story reading comprehension.

**Delimitations:**

**This study will be delimited to:**

1. A sample of thirty sixth year primary pupils at Salem Madian Official Language School.
2. The sixth-year primary stage story textbook (The Merchant of Venice)

**Hypotheses:**

In order to reach the purpose of the study, the following hypotheses will be verified:

1. There is a statistically significant difference at 0.05 level between the mean score of the control group and experimental group on the post



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administration of story reading comprehension test in favor of the experimental group.

2. There is a statistically significant difference at 0.05 level between the mean score of the control group and experimental group on the post administration of the reading motivation scale in favor of the experimental group.
3. There is a statistically significant difference at 0.05 level between the mean score of the pupils of the experimental group on the pre- and post- administrations of the story reading comprehension test in favor of the post administration.
4. There is a statistically significant difference at 0.05 level between the mean score of the experimental group pupils on the pre- and post-administrations of the reading motivation scale in favor of the post administration.

### **Methodology**

#### **Design:**

In order to investigate the effectiveness of mental imagery strategy in developing story reading comprehension skills and reading motivation, the researcher will adopt the quasi-experimental design including two groups. The experimental group and the control group are subjected to pre- and post- administrations of the study instruments prepared by the researcher to determine the differences between the mean scores of the experimental group and control groups.

#### **Participants:**

The participants will be two intact classes of sixth year primary stage pupils from Salem Madian Official Language School. The two classes are randomly selected and assigned to two groups. One class of 30 pupils comprises the experimental group and receives mental imagery strategy (the treatment). The second class of 30 pupils serves as a control group and receives the traditional teaching of story reading comprehension.

#### **Instruments:**

For the purpose of the study, the researcher will design the following instruments:

For the purpose of the study, the researcher will design the following instruments:

1. A Story Reading Comprehension Skills Questionnaire (RCSQ) to determine the story reading comprehension skills necessary for sixth primary stage pupils.

2. A Story Reading Comprehension Skills Test (SRCST) to measure the effectiveness of using mental imagery strategy in developing EFL reading comprehension skills of sixth primary stage pupils.
3. A Motivation scale towards reading.

### **Results and discussions**

Results were statistically analyzed in terms of the hypotheses. They were discussed in the light of the theoretical background and related studies. Results of the study were separated according to the hypotheses

### **Results Related to the first Hypothesis**

#### **Testing the first hypothesis**

The first hypothesis stated that "There is a statistically significant difference at 0.05 level between the mean score of the control group and experimental group on the post administration of story reading comprehension test in favor of the experimental group."

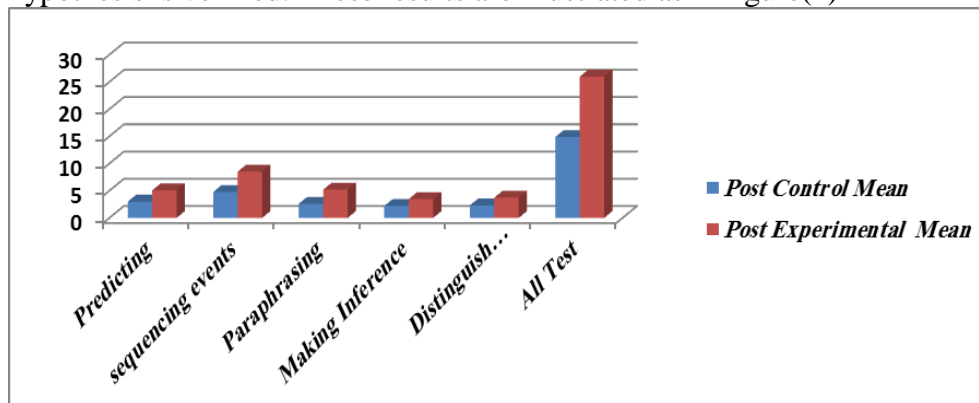
To verify the first hypothesis, the researcher used the t-test for independent samples. See table (2):

VARIABLES	The group	N.of cases	Means	S.D	df	T.Value	Sig.
<b>Predicting</b>	Control	30	3.00	1.017	58	-7.87	0.01 Sig.
	Experimental	30	5.07	1.015			
<b>sequencing events</b>	Control	30	4.77	0.858	58	-15.44	0.01 Sig.
	Experimental	30	8.50	1.009			
<b>Paraphrasing</b>	Control	30	2.60	0.932	58	-9.74	0.01 Sig.
	Experimental	30	5.20	1.126			
<b>Making Inference</b>	Control	30	2.20	0.610	58	-6.38	0.01 Sig.
	Experimental	30	3.47	0.900			
<b>Distinguish between facts and opinions</b>	Control	30	2.30	0.702	58	-7.96	0.01 Sig.
	Experimental	30	3.73	0.691			
<b>All Test</b>	Control	30	14.87	1.655	58	-21.47	0.01 Sig.
	Experimental	30	25.97	2.297			

**Table (2)** Comparing the reading performance of the two groups on the story reading comprehension test

\*\* significant at 0.05 level.

Table(2) Shows that the estimated t-value is significant at the 0.01 level (df=.58) . This means that there is a statistically significant difference between the mean score of experimental group and the control group on post-administration of the story reading comprehension test in favor of the experimental group due to implementing mental imagery strategy. In other words, the experimental group students outperformed the control group students in their EFL story reading comprehension level. Hence, the first hypothesis is verified. These results are illustrated as in figure(2)



Figure(2) The mean score of the control group and experimental group on the post administration of the story reading comprehension test

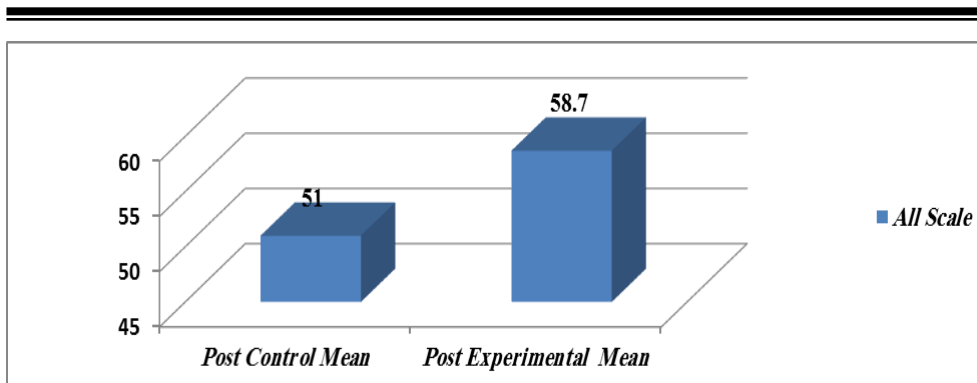
Testing the second hypothesis:

The second hypothesis stated, “There is a statistically significant difference at 0.05 level between the mean score of the control group and experimental group on the pre- post administration of motivation scale in favor of the experimental group.”

Table(3) Comparison between the experimental group and control group pre and post administration of the motivation scale

VARIABLES	The group	N.of cases	Means	S.D	Df	T.Value	Sig.
Motivation	Control	30	51.00	1.722	58	-9.018	0.01 Sig.
	Experimental	30	58.70	4.348			

Table(3) shows that there is a statistically significant difference between the mean score of experimental group and the control group on pre and post-administration of the motivation scale in favor of the post test where the t-value = (9.01). This value is statistically significant at (0.01) and (df=58). Hence, the second hypothesis is verified as shown in the figure(3).



Figure(3) the mean score of the experimental group pupils on the post-administrations of the motivation scale

Testing the third Hypothesis:

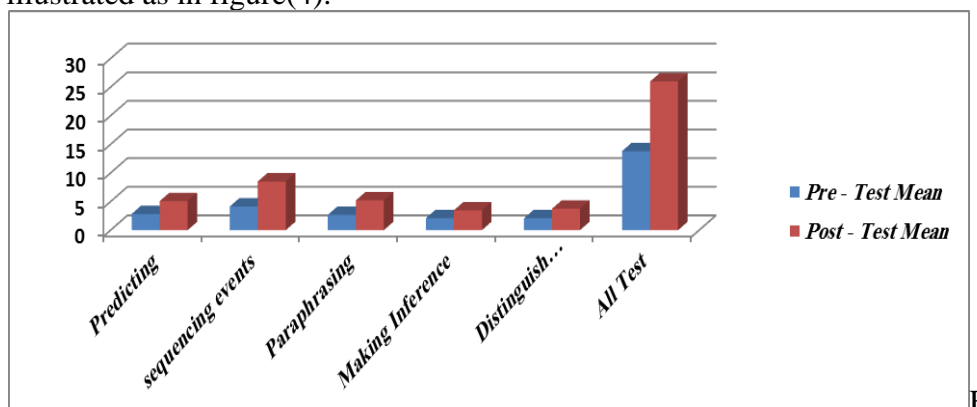
The third Hypothesis stated, “ There is a statistically significant difference at 0.05 level between the mean score of the pupils of the experimental group on the pre- and post- administrations of the story reading comprehension test in favor of the post administration.”

Table(4) Comparison between the experimental group pre and post administration of Story Reading Comprehension test

VARIABLES	The practice	N.of cases	Means	S.D	df	T.Value
<b>Predicting</b>	pre – test	30	2.83	0.95	29	-9.01**
	post – test	30	5.07	1.01		
<b>sequencing events</b>	pre – test	30	4.13	0.68	29	-21.18**
	post – test	30	8.50	1.00		
<b>Paraphrasing</b>	pre – test	30	2.67	0.95	29	-13.32**
	post – test	30	5.20	1.12		
<b>Making Inference</b>	pre – test	30	2.10	0.30	29	-7.24**
	post – test	30	3.47	0.90		
<b>Distinguish between facts and opinions</b>	pre – test	30	2.07	0.25	29	-11.37**
	post – test	30	3.73	0.69		
<b>All Test</b>	pre – test	30	13.80	1.710	29	-26.58**
	post – test	30	25.97	2.297		

\*\*Significant at 0.05 level.

Results in table (4) illustrate that the estimated t-value is significant at the 0.01 level (df=29). This means that there is a statistically significant difference between the mean score of the experimental group students on the pre-post administration of the story reading comprehension test in favour of the post-test . This indicates that mental imagery strategy was effective in developing primary stage pupils’ story reading comprehension. Hence, the third hypothesis is verified and accepted. These results are illustrated as in figure(4).



Figure(4) The mean score of the control group and experimental group on the pre- post administration of the story reading comprehension test Estimating the effect size:

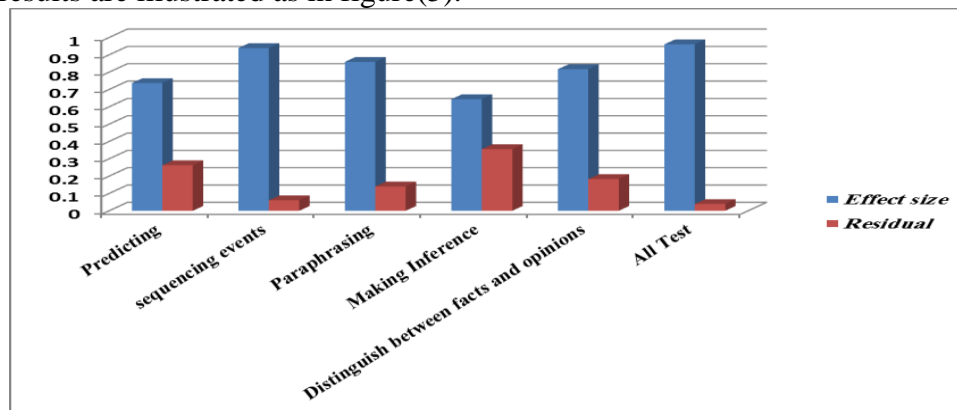
In order to determine the effect size of the Mental Imagery strategy on the story reading comprehension performance of the experimental group, Eta square ( $\eta^2$ ) was calculated.(see table5)

Table(5)The Effect Size of Mental Imagery Strategy on the story reading comprehension performance of the experimental group

Sub-Skill of RC	$\eta^2$	Effect size
<b>Predicting</b>	73.7 %	High
<b>sequencing events</b>	93.9 %	High
<b>Paraphrasing</b>	86 %	High
<b>Making Inference</b>	64.4 %	High
<b>Distinguish between facts and opinions</b>	81.7 %	High
<b>Total Test</b>	96.1 %	<b>High</b>

Results in table (5) indicate that the effect size ( $\eta^2$ ) ranged from (0.644 to 0.961).The effect size percentages are (73.7%, 93.9%, 86%, 64.4%, 81.7 respectively). This indicates a high effect size for all story

reading comprehension sub-skills of the experimental treatment. These results are illustrated as in figure(5).



Figure(5) Effect Size of Mental Imagery Strategy on the story reading comprehension performance of the experimental group

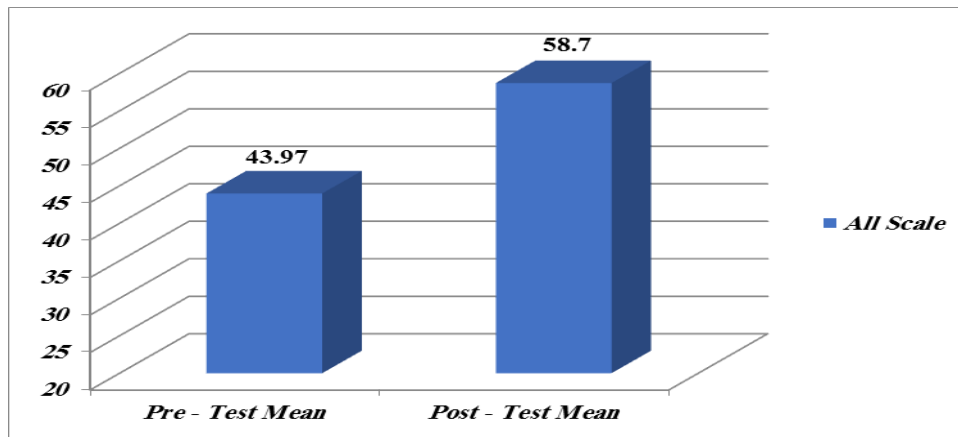
#### Testing the fourth hypothesis

The fourth hypothesis stated, “There is a statistically significant difference at 0.05 level between the mean score of the experimental group pupils on the pre- and post- administrations of the motivation scale in favor of the post administration.”

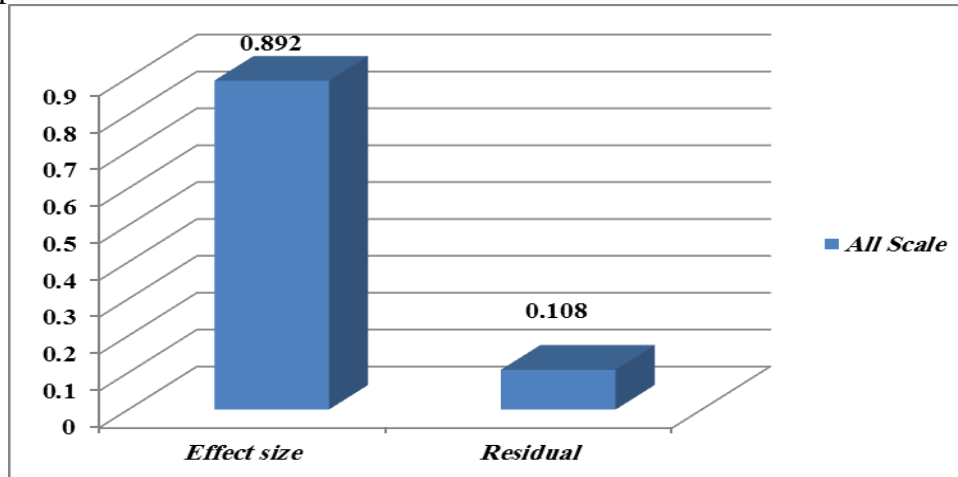
Table (6) A comparison of the mean score of the experimental group pupils on the pre- post administration of the motivation towards Reading scale

VARIABLE	The practice	N.of cases	Means	S.D	df	T.Value	Sig.	Effect size ( $\eta^2$ )	Effect size
Motivation	pre – test	30	43.97	2.671	29	- 15.443	0.01 Sig.	89.2%	High
	post – test	30	58.70	4.348					

Results in table (6) illustrate that there is a statistically significant difference between the mean score of experimental group and the control group on pre-post-administration of the motivation scale in favor of the experimental group (highest mean=92.5) as the estimated t-value (169.2) is statistically significant at (0.01) and (df=29). The effect size of the mental imagery strategy estimated as (0.892%) of the motivation. This means that 89.2% as a value of motivation resulted from the great effect of the mental imagery strategy. Hence, the fourth hypothesis is verified. These results are illustrated in figure (6)



Figure(6) the mean score of the experimental group pupils on the pre- and post- administrations of the motivation scale



Figure(7)The effect size of Mental Imagery strategy on motivation

Based on the above analysis, it could be stated that Mental Imagery Strategy was effective in enhancing story reading comprehension of sixth year primary Language school pupils and their motivation towards reading.

#### **Testing the third hypothesis**

The third hypothesis stated that “There is a statistically significant difference at 0.05 level between the mean score of the pupils of the experimental group on the pre- and post- administrations of the story reading comprehension test in favor of the post test.”

T- Test of the pre – test comparing the control and the experimental groups over all Total degree of A Scale

VARIABLES	The group	N.of cases	Means	S.D	df	T.Value	Sig.
All Scale	Control	30	51.00	1.72	58	-9.01**	0.01 Sig.
	Experimental	30	58.70	4.34			

## significant at 0.01 level

Table(7) shows that there is a statistically significant difference between the mean score of experimental group and the control group on pre-post-administration of the motivation scale in favor of the post test (highest mean=58.7) as the estimated t-value (9.018) is statistically significant at (0.01) and (df=58). Hence, the third hypothesis is verified and accepted.

#### Testing the fourth hypothesis

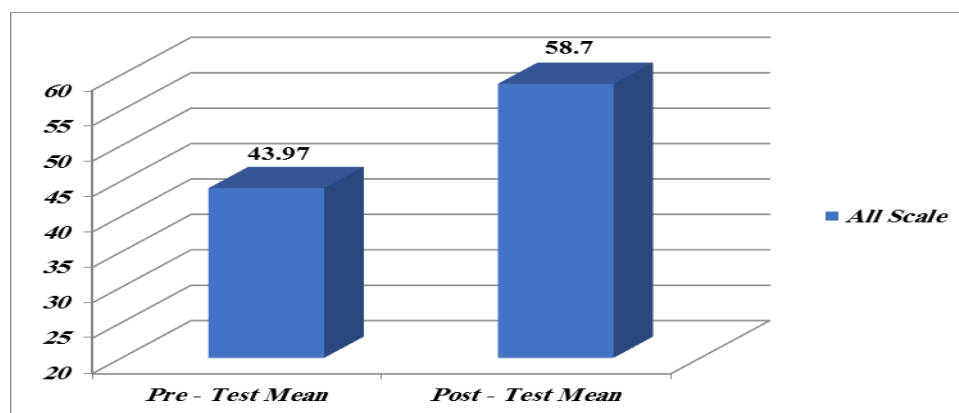
The fourth hypothesis stated that “There is a statistically significant difference at 0.05 level between the mean score of the experimental group pupils on the pre- and post- administrations of the reading motivation scale in favor of the post scale.”

Table (8) A comparison of the mean score of the experimental group pupils on the pre- post administration of the motivation towards Reading scale

VARIABLE S	The practice	N.of cases	Mean s	S.D	df	T.Valu e	Sig.	Effec t size η2	Effec t size
All Scale	pre – test	30	43.97	2.67	2	-15.44	0.01 Sig.	89.2%	High
	post – test	30	58.70	4.34	9				

Results in table (8) illustrate that there is a statistically significant difference between the mean score of experimental group and the control group on pre-post-administration of the motivation scale in favor of the experimental group (highest mean=92.5) as the estimated t-value (169.2) is statistically significant at (0.01) and (df=29). The effect size of the mental imagery strategy estimated as (0.892%) of the motivation. This means that 89.2% as a value of motivation resulted from the great effect of the mental imagery strategy. Hence, the fourth hypothesis is verified and accepted. These results are illustrated in figure (8)





figure(8) the mean score of the experimental group pupils on the pre- and post- administrations of the motivation scale

### **The results of the study**

The present study led to the following findings:

1- The mental imagery strategy was effective in developing EFL primary stage pupils' SRCS. This can be assured by these points:

- The experimental group pupils outperformed the control groupPupils in the post achievement test.
- The experimental group pupils' mean score in the post administration of the achievement test were much better than their mean score in the pre-administration of the test.

2- he proposed strategy was effective in developing EFL Primary stage pupils' motivation towards reading. This can be assured by these points:

- The experimental group pupils outperformed the control group pupils in the post administration of the motivation scale.
- The experimental group pupils' mean score in the post administration of the motivation scale were much better than their mean score in the pre-administration of the motivation scale.

### **Conclusion**

After conducting the proposed strategy and administering the tests, t-test and Eta-squared formula that were used in analyzing the obtained data. Scores of the study group in the pre-and post-tests were analyzed and compared. Results revealed the following:

MIS was proved to be highly effective in raising pupils' critical thinking skills, self-questioning . It also provided them the opportunity to communicate and interact with their peers. Furthermore, It helped teachers to change their methods of teaching story , replace traditional ways with

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more creative ones in order to motivate pupils to be critical readers. Thus, the pupils are highly motivated to form mental representations, infer and predict what they are reading.

**Suggestions for further research:**

The current study suggested the following researches:

- 1- *Applying the proposed Mental Imagery Strategy to different stages (i.e., preparatory, secondary and college).*
- 2- Replicating the experimental treatment on large samples
- 3- Supporting pupils to read different extensive literary books (e.g. stories and novels) to activate mental imagery.
- 4- Conducting the proposed strategy on other different skills ( listening, speaking, and writing).
- 5- Conducting the proposed strategy on critical reading.
- 6- Conducting the proposed strategy on Quranic Stories at Al-Azhar Education.

**Definitions of the terms:**

**Reading Comprehension:**

Deutsch (2005) showed that reading comprehension is the process of extracting and constructing meaning through interaction and involvement with written language. It is understanding and creating meaning from the text.

Reading is defined as the connection that the reader makes with the written word and uses prior knowledge to decode the meaning of that written selection (Canals, 2011).

Reading comprehension is also defined as the process in which the reader tries to understand the total meaning of the text using their background knowledge and basic reading skills. Thus, readers who are familiar with the topic will understand it easier than those who are not familiar with it (Afrilianti, 2014).

The researcher defines Reading Comprehension in the current study as the process in which the pupil visualizes, analyzes, thinks critically and interacts with the text in a meaningful way in order to be able to develop imagination, inferencing, prediction and higher order thinking skills.

**Mental Imagery:**

Thomas (2007) believes that mental imagery is a “quasi-perceptual experience, it resembles perceptual experience, but occurs in the absence of appropriate external stimuli. It is also generally understood to bear intentionality and thereby to function as a form of mental representation.”

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Douville & Algozzi (2004) refers to it as “Sometimes referred to as “using their mind’s eye”, mental imagery serves as a kind of internal blackboard or personal movie screen that aids in dynamic problem-solving of both verbal and spatial tasks.”

The researcher can define mental imagery as a reading strategy that motivates learners to create mental images of the descriptive texts and narrative stories, they handle through using different senses (of sight, smell, sound, touch and emotions) in addition to joining their new and background knowledge.

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