

Using PQ4R Strategy to Develop Critical Reading Skills and Increase Motivation for Learning English for Preparatory School Underachieving Pupils

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Abstract

This research aimed to explore using PQ4R strategy on developing critical reading skills and motivation for learning English for preparatory school underachieving pupils.

The essential critical reading skills for 1st year prep school pupils were determined through using a checklist approved by a panel of jury specialized in teaching EFL and special needs.

The researchers prepared and employed a critical reading skills' test and a motivation scale for learning English.

The psychometric properties of them were verified. The research participants were selected and divided into an experimental group and a control group. Each group consists of (20) pupils.

The experiment lasted for six weeks and the quasi-experimental design was followed.

Data analysis confirmed that using PQ4R strategy has a great effect on developing critical reading skills and motivation for learning English for 1st year prep school underachieving pupils.

So, the aim of the research was attained as using PQ4R strategy revealed a great

effect size on developing the critical reading skills and motivation for learning English for 1st year prep school underachieving pupils of the experimental group. Based on the findings, it was suggested that instructors should give more attention to critical reading skills in English for preparatory stage through using PQ4R strategy.

Also, using PQ4R strategy in developing other language skills for preparatory stage underachieving pupils was suggested.

Keywords:*PQ4R Strategy; Critical Reading; Motivation; Underachieving Pupils.*

Introduction

Learning and acquiring a foreign language is a significant way of communication between people. Thus, mastering English is something which is very crucial for everyone to improve knowledge and understanding of others. As English is a global language, people from all over the world use it for their communication.

Reading is one of English language skills that should be learned because it is significant to acquire general knowledge, spelling, writing and vocabulary. Therefore, the key objective of teaching reading is to teach how to read texts written in English that will help them to obtain the language. Also, reading aims to discover meaning of what they have read, to improve critical reading skills and to answer questions based on the reading text. (Al sulami, 2021, p. 124)

Also, Kusiak-Pisowacka (2020) stated that improving critical reading skills is a main part of reading instruction, particularly reading texts directed to more advanced learners. Critical reading is an essential requirement for effective involvement in modern social life, wherever reading printed texts and online texts is a daily activity. (p.198)

Moreover, critical reading is a very important skill that learners must have. It is high-level of comprehension skills because a good critical reader is capable to go beyond the literal interpretation of what he reads. In learnt English, learners need to deal with assignments and tasks provided by the teacher. So, to do this efficiently and effectively, learners must be able to evaluate what they read critically. (Diman, et al., 2020, p. 32)

While critical reading is essential to acquire English language, Khodary and AbdAllah (2014) stated that learners lack critical reading skills, mainly to recognize unstated main ideas, find the author's tone and purpose, deduce the meaning of words in context, make comparisons, draw conclusions, identify

cause and effect relationships, form personal justified opinions, distinguish contradictions in a text and evaluate arguments, and create inferences. The reason of the weakness in critical reading skills could be attributed to the unsuitable methods of teaching critical reading provided to learners (p. 248). Also, Rizk (2021) indicated that critical reading skills are neglected in the EFL curriculum in Egypt. There is no time assigned for teaching critical reading. Many learners usually tend to memorize information rather than filter it through their prior knowledge and reasoning. The weakness of these skills lies in the insufficient knowledge of critical reading skills and the rare practice in the reading classes to command the important skills.

Besides, a number of studies such as the studies of Abdelrasoul (2014), El-Garawany (2018), Dorra, Dadour, and El-bashbishy (2020), El-Bassuony, Mohaseb, and Moussa (2020), and Mohamed, Ismail, and Abdel Aziz (2022) stressed the fact that EFL critical reading skills are ignored in preparatory level despite their great importance in learning English and their relevance to other language skills. So, there was a necessity for using new strategies to develop EFL critical reading skills.

Additionally, as stated by Alizadeh (2016) motivation provides learners with an aim and a direction to follow. So, it has a crucial role in language learning.

Some difficulties may face learners due to the lack of enough motivation. It is very hard for learners to achieve effective learning without desire to learn (p. 11). Moreover, Sari (2019) stated that motivation is a desire helps learners to achieve certain aims.

It becomes a critical factor for defining the success of second or foreign language acquirement. It involves an amount of energy from learners to involve in action, to do more effort and to continue in action (p.8). Recently, English has become the international language and plays a central role in

communication between people in the real world. Using and learning English has become a required need of many people, mainly the young learners. Motivation is one of the crucial features in language learning effectively. (Nguyen, 2019)

Furthermore, a number of studies pointed out that different strategies should be used to develop students' motivation toward learning English such as Yang and Wu's study (2012) showed that using digital storytelling is important for enhancing student learning motivation. Also, Huang and Huang's study (2015) declared that using a scaffolding strategy is necessary for developing students' learning motivation and performance.

Al-Bari and Ibrahim's study (2017) assured that using communication strategies had a great effect on developing students' motivation to learn English. Moreover, Guo and Bai's study (2022) assured that using self-regulated learning strategy is essential for developing students' motivation.

So, pupils' motivation has a great effect on their academic performance and achievement. According to what is mentioned above and the previous studies, there is a requirement for building more positive motivation in our society. So, the researcher after reviewing the literature and previous studies saw that using PQ4R strategy is important for developing the most necessary critical reading skills and motivation for learning English for 1st year prep school underachieving pupils for the following reasons:

1. Bibi and Arif (2011) indicated that PQ4R strategy had a great effect on improving the academic achievement of students. (p. 247)
2. The use of PQ4R strategy encourages learners to know what to learn. Also, it is used to focus learners' attention, growing interest, involving new ideas to previously known concepts and building comprehension. Learners are encouraged to interact actively with the texts while reading. Using PQ4R is easy and can be applied to different academic texts. (Wahono, 2014, p.124)

3. PQ4R improves learners' questioning skill and helps them link their knowledge. Besides, it can be applied simply in any education level and cover teaching materials broadly. (Khumaira et al., 2015, p. 130)
4. According to Shoaib et al. (2016) PQ4R strategy used to improve the attention of slow learners in English subject at secondary level.
5. Using PQ4R strategy is important to develop reading comprehension skills and reflective thinking. (AlShamali, 2017)
6. PQ4R is an instructional strategy used to enhance reading fluency. (Aljboor, 2021)
7. Using PQ4R strategy helps learners to be more active in learning process in the classroom. (Rahmadia & Fatimah, 2021, p. 298)

From what is mentioned above, it is clear that using PQ4R strategy is so significant in developing critical reading skills. Consequently, the present research tried to examine using PQ4R strategy on developing most necessary critical reading skills and increasing motivation for learning English for 1st year prep school underachieving pupils to solve a due problem they face in learning English.

Context of the Problem

The problem of the current research was derived from the following resources:

First: The problem of the research was reinforced by reviewing previous related studies. Recent related studies such as Abdelrasoul (2014), El-Garawany (2018), Dorra, et al., (2020), El-Bassuony, et al., (2020), and Mohamed, Ismail, and Abdel Aziz (2022) affirmed the weakness of EFL pupils in critical reading skills and recommended using new methods, strategies, and techniques to develop these skills. Moreover, reviewing previous related studies such as the studies Yang and Wu (2012), Huang and Huang (2015), Al-Bari (2017), and Guo and Bai (2022). These studies emphasized the fact that

EFL pupils' motivation for learning English are neglected despite their unlimited significance in learning. So, there was a bad need for using new strategies to improve EFL pupils' motivation for learning English.

Second: The researchers prepared and administered a critical reading skills test to the 1st year prep school pupils to approve, document and analyze the information derived from the review of the related previous studies. Pupils' answers revealed the profound weakness in their critical reading skills and are in a dire need of developing their critical reading skills.

Third: The researchers designed and administered a motivation scale for learning English in order to measure pupils' motivation for learning English and confirm the information derived from the review of the related previous studies. The scale was composed of (20) statements. Results of this scale showed that pupils had a negative motivation for learning English.

Therefore, it was undoubtedly that those pupils were in a dire need of developing their critical reading skills and increasing their motivation for learning English.

Statement of the Problem

The research problem was identified in 1st year preparatory school pupils with low achievement in English weakness in critical reading skills and low motivation for learning English. Thus, the present research attempted to help such pupils acquire different critical reading skills and increase motivation for learning English using PQ4R strategy.

Questions of the Research

The present research tried to answer the following main question:

“What is the effect of using PQ4R strategy on developing the most necessary critical reading skills and motivation for learning English for 1st year prep school underachieving pupils?”

From this question, the following sub questions emerged:

1. What are the most necessary EFL critical reading skills for 1st year prep school underachieving pupils?
2. What are the features of the proposed framework using PQ4R strategy to develop the most necessary critical reading skills and motivation for learning English for 1st year prep school underachieving pupils?
3. What is the effect of using PQ4R strategy on developing the most necessary EFL critical reading skills of 1st year prep school underachieving pupils?
4. To what extent will the effect of PQ4R strategy on EFL critical reading skill vary from one skill to another?
5. What is the effect of using PQ4R strategy on developing motivation for learning English for 1st year prep school underachieving pupils?

Hypotheses of the Research:

This research hypothesized that:

1. There is a statistically significant difference between the experimental group and the control group pupils' mean scores on the post-administration of the critical reading skills test in favour of the experimental group.
2. There is a statistically significant difference between the experimental group's mean scores on the pre and post-administrations of the critical reading skills test in favour of the post-administration.
3. The critical reading skills are developed at different rates after using PQ4R in teaching critical reading skills in English for 1st year prep school underachieving pupils.

4. There is a statistically significant difference between the experimental group's mean scores on the post and follow up administrations of the critical reading skills test.
5. There is a statistically significant difference between the experimental group and the control group pupils' mean scores on the post-administration of the motivation scale for learning English in favour of the experimental group
6. There is a statistically significant difference between the experimental group's mean scores on the pre and post-administrations of the motivation scale for learning English in favour of the post-administration.
7. There is a statistically significant difference between the experimental group's mean scores on the post and follow up administrations of the motivation scale for learning English.

Variables of the Research

Independent Variable: The proposed framework using PQ4R strategy implemented with the experimental group in this research.

Dependent Variable: The development in the experimental group's critical reading skills and motivation for learning English by the treatment.

Aims of the Research

This research aimed at:

1. Identifying the critical reading skills most necessary in English for 1st year prep school underachieving pupils.

2. Developing the most necessary critical reading skills and increasing motivation for learning English for 1st year prep school underachieving pupils through designing a proposed framework using PQ4R strategy.
3. Measuring the effect of the suggested framework using PQ4R strategy on developing the critical reading skills for 1st year prep school underachieving pupils.

Significance of the Research

The research's significance lies in the fact that it was an attempt to develop critical reading skills and increase motivation for learning English for 1st year prep school underachieving pupils and it is hoped that the research results would contribute to:

1. Further affirmation on the importance of developing most necessary critical reading skills for 1st year prep school underachieving pupils.
2. Attracting the attention to the importance of using PQ4R strategy in developing critical reading skills in English.
3. Further confirmation on the significance of increasing motivation for learning English for 1st year prep school underachieving pupils.
4. Attracting the instructors' attention to an important category of learners which is underachieving pupils.

Delimitations of the Research

The present research was delimited to the following:

1. A sample of (40) 1st year prep school underachieving pupils.
2. Developing only the most necessary critical reading skills in English for 1st year prep school underachieving pupils.
3. Using PQ4R strategy in teaching (8) critical reading skills 1st year prep school underachieving pupils.

4. A limited duration for implementing PQ4R strategy for 1st year prep school underachieving pupils. (Two sessions per week, and each session takes 90 minutes over a period of six weeks).

Definitions of Terms

1. PQ4R Strategy

According to Pidianto (2017) PQ4R is a method used to help learners recognize, remember what they read and help the learning process with reading tasks. (p.6)

Also, Idiege and Cecilia (2018) defined PQ4R strategy as basically an acronym for preview, question, read, reflect, recite and review. (p.54)

In the present research, PQ4R strategy is defined operationally as a set of steps used by 1st year prep school underachieving pupils before, during and after reading a text.

2. Critical Reading

According to Par (2018) critical reading is defined as a dynamic process of creating meaning from the texts by involving interpretation, analysis, making inference, giving judgment, and evaluation. (p. 79)

Also, Majumdar et al. (2021) critical reading is an active process in reading a text that calls forward a profounder engagement with the text. This activity involves mental tasks such as understanding, interpreting, synthesizing, analyzing, and evaluating. (p. 2)

In this research, critical reading is defined as 1st year prep school underachieving pupils' ability to: distinguish main ideas from supporting details, identify cause - effect relationships, distinguish between facts and opinions, differentiate relevant and irrelevant information, interpret the author's purpose, draw conclusions, summarize the text, and suggest new titles for the text.

3. Motivation

Dörnyei and Ushioda (2013) defined motivation as the direction and scale of human behaviours, which controls ones' effort, choice, and persistence in face of problems.

Also, motivation is defined by Orhan Özen (2017) as a state where the individual displays various attitudes voluntarily to achieve a certain goal. (p.35)

Moreover, motivation is defined as one of the vital factors that play dynamic role in learning English at all levels. (Dilshad et al., 2019, p.689)

In the present research, motivation for learning English is defined operationally as how the pupils feel about what they learn and it is measured by the motivation scale for learning English scale which prepared by the researcher for this purpose.

4. Underachieving Pupils

Antao and Principal (2019) defined underachieving pupils as learners whose academic performance scores are significantly lower than those scored on the aptitude and standardized intelligence tests. (p.820)

Also, underachieving pupils are normally seen as less effective, unsuccessful learners, or less proficient; they are usually characterized as learners who get a low grade on a test. (Samperio, 2019, p. 77)

In the present research, underachieving pupil is defined as a pupil whose academic scores are low and who got low marks in assessment, classroom work, and activities.

Review of Literature

The theoretical background consists of four sections. The first section includes some overviews of PQ4R strategy, its use in English language teaching and steps of using PQ4R strategy. The second section involves critical reading importance, characteristics of critical readers and critical reading skills.

The third section presents motivation importance, factors that affect motivation, and types of motivation. The fourth section deals with characteristics of underachieving pupils and causes of low achievement.

The First Section: PQ4R Strategy

PQ4R Strategy Significance in Teaching English

Al-Qawabeh and Aljazi (2018) presented that this strategy makes reading a more dynamic process, motivates previous knowledge among learners, and relates it to new learning with the transmission of the learning effect. Moreover, it encourages learners' motivation to learn with all their mental capabilities in all learning fields. It also increases the learners' confidence in their ability to participate positively in learning, making them the focus of the learning process, and raising the academic achievement of the learners. (p. 161)

Besides, PQ4R strategy is useful in teaching because it offers a new learning model that is able to encourage the ideal usage of cognitive skills. It offers chances for learners to learn methodically, efficiently and professionally. This strategy needs learners to repeat the reading material from the stage of revising the reading or (preview), asking (question), reading (reading), reflection on information that has been acquired, telling or rewriting (recite), and review. It is thought to be capable to understand the perfect circumstances to be achieved in the learning process of understanding reading. (Khusniyah, 2018, pp.167-168)

Moreover, Marisa, Monalisa, and Abadi (2019) pointed out that PQ4R is used to help learner understand and remember what they read. It enables learners in the learning process in class with reading activities. The basic idea behind teaching reading is that it is the most vital basic to develop comprehension of the reading material or text. (p. 33)

Furthermore, Fauziah (2021) indicated that PQ4R strategy helps learners have a better understanding of written language. This encourages them to focus

on organizing the data in their minds and making it relevant. It leads to many areas of active learning and deeper information processing. (p. 318)

Based on what is mentioned above, it becomes clear that PQ4R strategy is very vital on developing different language skills. Also, it helps pupils understand and comprehend reading texts. It raises learners' confidence in their ability to join positively in the learning process.

Steps of PQ4R strategy

Wahono (2014) clarified that PQ4R strategy motivates learners' prior knowledge through using six steps; preview (activate prior knowledge), question, read, reflect, recite, and review. These final steps approve the knowledge activated in the preview and create channel of new knowledge. (p.122)

Also, Wahyuningsih and Kiswaga (2019, p. 84) mentioned the steps of PQ4R as follows:

- (1) Preview (performing brief reading to identify the main topics/the learning objectives that should be attained);
- (2) Question (formulating questions based on the main topics that have been found from the main topics/the learning objectives by using the question words such as how, who and what);
- (3) Read (reading and answering the questions that have been formulated);
- (4) Reflect (simulating/informing the materials in the text);
- (5) Recite (summarizing the overall discussion on the topic of the given subject);
and
- (6) Review (reading the abstract that has been summarized from the main topics/the learning objectives and re-reading the materials if the students are not sure yet with the abstract).

The Second Section: Critical Reading

Critical Reading Importance

According to Al-Meshr (2012) critical reading is one of the most important skills in English and other languages. Through critical reading, the learners can study the information to see if it is precise and evaluate ideas to decide if they are valid and applicable to their experience. Learners want to be critical readers to handle the difficulty of the age of information. (p.2158)

Also, Sultan et al. (2017) stated that the critical reading significance depends on the fact that in the era where information and communication technology has advanced rapidly, the number of accessible reading texts is also increasing. Recently, it becomes very easy to get information from electronic media or printed texts; nevertheless, the information is not always precise and cannot certainly be trusted.

In addition, critical reading includes the reader's energetic participation to think deeply about the text in revealing and rebuilding its meaning and this involves higher order thinking abilities about a text. The reader has the right to judge and evaluate texts' content. So, readers need to critically retrieve and select suitable information before accommodating its content. (Par, 2018, p. 161)

Moreover, Yildirim and Soylemez (2018) pointed out that critical reading is a key skill learners have in this century. In progressively sophisticated technological developments, it permits learners to access many readings from various media. Actually, not all the reading from several media is accurate. There are some readings that are not in agreement with the facts, but it is used for definite purposes. In reading tasks, learners are able to evaluate the truth of the information enclosed in the reading texts. Consequently, it is very essential that critical reading is taught to students early, so that learners are capable of analyzing whether the information is true or false.

Furthermore, Salem AlSereidi (2019) emphasized the significance of critical reading as a key demand that learners need to perform well in the world and more essentially have an active role in creating and producing the knowledge rather than being consumers of the knowledge that is creating consistently and continuously all over the world.

From what is mentioned above, it is obvious that critical reading is a dire request for having an active role in constructing knowledge. Also, critical reading skills help students analyze the accuracy of the information contained in the reading texts whether printed or online.

Characteristics of Critical Readers

Bedau and Barnet (2011) indicated that a critical reader has the ability to:

- (1) review arguments from the text precisely,
- (2) recognize claims,
- (3) determine stated or implied assumptions, and
- (4) analyze, evaluate, and explain the purpose or consequence of the use of particular facts or sources of information.

According to Femilia (2018, p. 30) the critical readers have a capability to evaluate the writer's idea within the text. They generally place themselves toward the writer's idea based on their own knowledges. They can decide how to respond to the text logically and passionately.

Critical Reading Skills

According to Facione (2011, p. 5-7; 2015, p. 5-8), critical reading skills contain six levels: (1) interpretation skill, (2) analysis skill, (3) inference skill, (4) evaluation skill, (5) explanation skill, and (6) self-regulation skill. So, these comprehensive skills are capable of encouraging learners' capabilities in understanding, evaluating, and providing responses to difficulties critically. As these skills develop, learners are also encouraged to think critically,

particularly in dealing with several pieces of information acquired from the reading texts.

Also, Manarin, et al. (2015, p. 4) indicated that reading critically consists of the following main skills:

1. Evaluating credibility.
2. Recognizing patterns of textual elements.
3. Differentiating between main and subordinate ideas.
4. Creating judgments about how a text is argued.
5. Creating relevant inferences about the text.

Moreover, Hassan (2016, p. 9) and Femilia (2018, p. 31) stated that critical reading skills are as follows:

1. Separating important and unimportant information.
2. Differentiating cause and effect relationship.
3. Understanding information implicitly stated in the text.
4. Identifying the main ideas.
5. Distinguishing between facts and opinions.
6. Discriminating relevant and irrelevant information.
7. Identifying author's purpose.

The Third Section: Motivation

Importance of Motivation

According to Choosri and Intharaksa (2011), motivation is both internal and external and can also be important because it helps one learn the identity of oneself and advocate that motivation has a direct effect on the learners' achievement. Motivation is the main factor that may clarify why learners neglect or achieve learning English.

Motivation has been broadly known by both instructors and researchers as one of the vital aspects that impact the success and rate of second/foreign language learning. Motivation offers the main energy to start learning English

language and later the driving force to bear the long and often boring learning process. It has an active role on academic success among learners generally and English language learners particularly. Both intrinsic and extrinsic motivation can work as driving force that affect learners whole performance. (Humaida, 2012, p.1)

Also, Long et al. (2013) assured that motivation plays a central role in foreign learning. Once motivation shaped, the learner will use a creativity study attitude to learn, focus attention in the classroom to master knowledge, and express a strong interest in learning. Also, the learner will have a kind of motivation to make state of attention, particularly in the learning process. (p. 136)

Additionally, motivation is an essential part of the learning process particularly learning a language to attain the desired aims. It is one of the most main elements for students to be successful in language learning. (Rehman et al., 2014)

Besides, it is widely accepted for most of the learning fields that motivation is the ultimate significance to accomplish learning goals. Without motivation, there is no effort for learners to do something skillfully. So, motivation is closely related to learning process (Siska, 2015, p.51).

In addition, Fachraini (2017) motivation is a crucial concept to success in learning. Student who has high motivation would do the best in learning even though the materials seemed difficult. On the other hand, student who has low motivation would get bored and be uninterested in learning even though the materials given were so easy. So, motivation is an essential element together with ability to succeed in learning the target language. (p.47)

Moreover, Hong and Ganapathy (2017) indicated that motivation is a process that cannot be observed directly, but can be inferred by behaviours, such as effort, persistence and verbalization. It includes aims that drive the

direction and physical or mental activity that guide towards achieving goals. (p. 19)

Furthermore, motivation is one of the most major elements in the learning process. The purposes of learning are difficult to be achieved without motivation. When learners have it in learning process, they will understand the materials, mainly English. (Purnama et al., 2019, p. 539)

Based on what mentioned above it is clear that motivation is a important factor for engaging the EFL learners in their learning process and acquiring different skills.

Factors that Affect Motivation

Learners' motivation in the class is influenced with some factors of classroom environment. One of the main factors in creating positive atmosphere in the classroom is the teacher. According to Rahman (2018), teachers have the key effect on learners' motivation, followed thoroughly by learners' own attitudes towards learning and then parental impact. Also, the learning environment has a major impact towards the effective learning activity and learners' motivation. (p.3)

Also, Harjali (2017) assured that learners can be able to manage, interact, and achieve their learning objectives, facilitated by learning activities based on selected materials and strategies. (p.135)

Furthermore, Batubara et al. (2020) revealed that the real learning tasks and activities are effective when teachers able to combine and make good interaction between the lesson, teaching strategy, and means of learning. (p.77)

Types of Motivation

Radfar and Lengkanawati (2020) indicated that there are two types of motivation. Integrative motivation refers to the need to learn a language to participate effectively into the target language, whereas instrumental

motivation refers to the learners' desire to learn a language for their purposes such as employment or travel. (p.116)

Also, Legault (2020) specified that intrinsic motivation refers to engagement in behavior that is naturally satisfying or enjoyable. It is noninstrumental in nature, that is, intrinsically motivated action is not depending on any outcome separable from the behaviour itself. On the other hand, extrinsic motivation refers to performance of behaviour that is basically depending on the achievement of an outcome that is separable from the action itself. In other words, it is instrumental in nature. It is achieved to attain some other results. (p. 2416)

The Fourth Section: Underachieving Pupils

Characteristics of Underachieving Pupils

Musa, Lie, and Azman (2012) outlined the characteristics of underachieving pupils as follows:

- (1) Underachieving pupils see English as a difficult subject to learn.
- (2) They lack experience to the target language.
- (3) They lack care to use English in an environment outside the classroom.
- (4) They depend on the teacher as a specialist
- (5) They have an inadequacy of vocabulary, and they lack the motivation to learn English, which causes a negative attitude towards English learning.

Also, Carman (2015) indicated that underachieving learner includes nonclassified learners who are stressed academically or performing below proficiency. Underachieving pupils have been identified by their teachers as needing academic support, whether the learners perform poorly during classroom work or on assessments. Other characteristics of underachieving learners may include below-level grades and making little or no academic development. (p. 2)

Moreover, underachieving pupils often have the strong desire to follow self-control and study hard. However, they cannot persistent and often drop at the half way. Most of them are lacking of learning enthusiasm, learning perfect and ambition. They have no specific purpose and interest in learning English and they are not good at holding the core of things so their learning effect is rather low. Learning psychology holds that underachieving pupils could also become a successful student because most of them own the same ability of learning with other common learners. However, the great change needs patient and careful philosophical education, step by step guidance and support, and scientific teaching organization. (Tang, 2016)

Causes of Low Achievement

According to Al-Zoubi and Younes (2015, pp. 2263- 2264) there are many reasons for the academic low achievement. They are as follows:

- 1) Medical and psychological reasons: There are many causes related to medical and psychological reasons such as:
 - a. Depression causes weakness and inability in students' concentration.
 - b. General anxiety disorder may cause a situation of forgetting and weakness in attention.
 - c. Exam sever fear is accompanied with less paying attention.
 - d. The lack of the ability to focus attention on one thing for a proper time. Also, it may be associated with hyperactivity disorder.
- 2) Reasons related to the learner: The weakness of enthusiasm, lack of experience, lack of abilities, fear of failure and lack of self-confidence.
- 3) Educational reasons: The additional pressure on the learner to get higher marks in the exams make learners live in tension, confusion and lack of concentrating during the exam which will reflect on academic performance negatively.
- 4) Lack of motivation for success.

To sum up, the academic low achievement attributed to various factors such as: teachers, learners, and the school environment. These factors are mainly responsible for the low academic performance of the learners.

Method

The research used a quasi-experimental approach to collect data. The following is a description of the research participants, instruments and treatment material, and the suggested steps for using the suggested framework using PQ4R strategy.

Participants

The sample of the research was chosen according to the following steps:

1. Reviewing the statistics of 1st year prep school pupils' results of the first semester of the academic year 2021-2022.
2. Reviewing the statistics of 1st year prep school pupils' results in English subject and identifying pupils whose grades were lower than 50% and they were (62) pupils from total number (310) pupils.
3. Pupils whose grades were only low in English subject were excluded because they were classified as pupils with learning disabilities. So, (13) pupils were excluded and the total number became (49) pupils.
4. The Stanford-Binet test was administered by the psychologist to exclude who got scores lower than 90 and they were (9) pupils because they were classified as slow learning pupils. So, the total number of the research participants became (40) pupils.
5. The research sample was randomly divided into two groups. Each one consisted of (20) pupils. The research was conducted in a governmental prep school named Belal Ibn Rabah for Basic Education, Giza, aiming to improve their critical reading skills and increase motivation for learning English.

Duration of the Experiment

The proposed framework was taught in six weeks, two sessions per week, and each session takes 90 minutes during the second semester of the academic year 2021-2022. In addition to an introductory session which was held in order to introduce “PQ4R strategy” to the pupils. The experimentation started on the 7th of March and ended on the 18th of April, 2022.

Critical Reading Skills Checklist

Critical reading skills checklist purpose

The researchers designed a checklist to identify the required critical reading skills for 1st year prep school underachieving pupils.

Content of the checklist

The primary form of the checklist included (11) critical reading skills (see Appendix I). A panel of jury rated these skills according to a rating scale containing three levels; very important, important, and less important. Each level of importance was given an estimated value to be scored by the researchers, i.e. very important = 3, important =2, and less important = 1.

Validity of the checklist

The checklist was submitted to a panel of jury specialized in the field of curriculum and methods of teaching EFL and special education. The following modifications were carried out as suggested by the panel of jury:

- Omitting the skills “deducing the meaning of unfamiliar lexical items” and “interpreting the author’s tone.”
- Integrating the skills “identifying the main idea of the reading text” and “identifying supporting details of the reading text” to be “distinguishing main ideas from supporting details.”
- Arranging the chosen skills logically.

So, as the jury indicated, the checklist became valid and the skills included became clear and adequate. After analyzing the jury responses, the

researchers selected those skills that were agreed upon by at least 80% or more by the jury members to be the most necessary skills for 1st year prep school underachieving pupils. The final form consisted of (8) skills. Thus, the first question of the present research was answered. (The checklist in its primary and final versions and the names of the jury members are in appendices (I) and (VI).

Instruments of the Research

The current research use of the following instruments:

- A pre/post- critical reading skills test.
- A motivation scale for learning English.

1. A pre/post- critical reading skills test

Aim of the test

The pre/post- critical reading skills test was designed by the researchers to measure the critical reading skills of the research participants. It was prepared to be administered to the two groups of the present research twice: first, prior to the experiment as a pre-test and to make sure that the pupils of both groups were at the same level before starting the treatment. Hence, the development attained by the experimental group could be attributed to PQ4R strategy. Second, it was to be used as a post-test, to compare its scores with those of the pre-test to investigate using PQ4R strategy on developing the experimental group pupils' critical reading skills.

Construction of the test

The researchers constructed the test after reviewing the following sources:

- Previous studies concerned with language tests, particularly those that are concerned with developing critical reading skills such as **Awad (2011)**, **Migdad (2016)**, and **Khweireh (2017)**.

- Recognizing the skills to be measured by the test through the final form of the checklist. (See appendix I for the final form of the critical reading skills checklist).

Description and scoring of the test

The final form of the test consisted of three main questions contain (22) items that were prepared by the researchers to test the necessary critical reading skills for 1st year prep school underachieving pupils. The final form of the test is shown in Appendix (II) and the key answer of the test is shown in Appendix (III)

Validity of the test

To realize whether or not the pre/post- test was valid for what it was intended to measure, the researchers depended upon two aspects of validity. The first one was the content validity; the first form of the test was given to 5 TEFL and special need specialists to evaluate each question in terms of content and level of critical reading skills measured. Besides, they were asked to evaluate the test as a whole in terms of: number of questions and accuracy. The second aspect of validity was the experimental validity which was calculated by the square root of the reliability coefficient.

Content validity

To determine the test's content validity, a criteria questionnaire prepared by the researchers kindly asked 5 TEFL and special needs specialists to validate the test. The jury members approved test's validity and suggested only using simpler test instructions that may not confuse the pupils.

Experimental validity

The researchers computed experimental validity of the test statistically using the following formula.

$$\text{Test validity} = \sqrt{\text{reliability coefficient}}$$

$$\text{Validity} = \sqrt{(0.9^{10})}$$

$$\text{Validity} = 0.9^5$$

This verified that the critical reading skills test was statistically valid.

Administration of the test

The pre- test was administered to the control and experimental groups on the 20th of February 2022. The post- administration to the two groups was on the 6th of March 2022. Post- administration conditions were relatively the same as those of the pre- administration. The follow up administration was on 26th of May, 2022.

Piloting the Test

The pre/post- test was piloted on (20) 1st year prep school underachieving pupils, other than the subjects of the research. To test its reliability, the test was administered to them twice and the time between the two administrations was two weeks to ensure that they would not be able to remember their answers in the first administration. So, the pilot study of the test aimed at the following:

- Estimating the time for the test

It was decided that a period of 90 minutes would provide ample time for the pupils to answer the test questions. As the group used to calculate reliability of the test was the same group used to estimate the test time, each student was required to write down on his/her exam paper the time taken for answering the test exactly. Then, the test time was estimated in the following way:

Summation of the time taken by all pupils

Number of pupils

So, test time = 90 minutes

- Establishing the reliability of the test

In order to establish the reliability of the pre/post- critical reading skills test, the following methods were used:

- Interrater reliability

The answers of the group of (20) pupils mentioned in piloting the test were evaluated by two independent raters. Using Pearson's coefficient correlation between the first and the second rater's estimations, it was found that the correlation coefficient was ($r = .96$) which is significant at the level 0.01.

- Test-retest reliability

The researchers used test-retest and it is estimated by calculating the correlation coefficient of the measured values at two separate time points. A critical reading skills test was pre-administered on the 20th of February 2022 and after two weeks the test was post-administered on the 6th of March 2022. The two administrations of the test were administered to (20) pupils using Pearson's coefficient correlation. The correlation was ($r = .98$) thus the pre/post- critical reading skills test had high test- reliability.

2. Motivation Scale for Learning English

A pre-/post- motivation scale for learning English was constructed to be administered to the two groups of the experiment. It was used prior to the experiment to make sure that pupils of both groups have the same motivation before starting the experiment, and therefore the progress achieved by the experimental group in its post-administration to both groups could be attributed to the suggested framework they have been taught. So, it was constructed to be

used to investigate the effect of PQ4R strategy on developing motivation for learning English for 1st year prep school underachieving pupils.

This motivation scale for learning English consists of two dimensions. The first dimension consists of (22) statements. The second dimension consists of (13) statements. The scale is consisted of (35) statements and each statement has a five-point—Likert format: (5) Strongly Agree (SA), (4) Agree (A), (3) Uncertain (U), (2) Disagree (D), and (1) Strongly Disagree (SD).

Sources of the Scale Items

The review of related literature and studies that dealt with motivation for learning English such as Chalak and Kassaian (2010), Purnama, et al.,(2019), and Legault (2020).

Constructing the Motivation Scale for Learning English

The following procedures were followed in constructing the motivation scale:

1. Reviewing literature and previous studies that dealt with motivation scales.
2. Designing the motivation scale which includes 35 statements.
3. Submitting the motivation scale in its primary form to the jury members.

Validity of the Motivation Scale for Learning English

The motivation scale was submitted to 5 jury members. The jurors were kindly asked to provide their opinions in terms of the following:

1. The extent to which the motivation scale is suitable for application.
2. Deciding whether some statements need to be modified, added, or omitted.

Suggestions were provided, modifications were made, and the scale in its final form contained (35) statements and was valid and suitable for application. For the final form of the motivation scale and the criteria of judging it, see appendix IV.

Reliability of the Motivation Scale for Learning English

To estimate the reliability of the motivation scale, it was administered to (20) pupils, other than the present research subjects, and after 15 days the motivation scale was re-administered again to the same sample. Pearson correlation formula was used to calculate the correlation between the two administrations which is ($r = 0.91$), significant at the level 0.01. Thus, the motivation scale was considered reliable.

Treatment Material

The researchers designed the proposed framework using PQ4R strategy which consisted of (11) sessions. The first session was an introductory session about PQ4R strategy and tools used in the sessions, the skills of EFL critical reading skills and the importance of these skills to the research sample. The rest sessions were instructional ones through which the EFL critical reading skills were practiced (distinguishing main ideas from supporting details, identifying cause - effect relationships, distinguishing between facts and opinions, differentiating relevant and irrelevant information, interpreting the author's purpose, drawing conclusions, summarizing the text, and suggesting new titles for the text). (See Appendix V)

Procedures and Phases Using PQ4R Strategy:

During the sessions of the suggested framework, the following main PQ4R strategy procedures and phases are used:

A. Warm-up:

- The instructor begins every session by asking the pupils a question or more about a specific topic.

B. Teaching Steps:

Teaching using PQ4R strategy is divided into three main phases. Each phase consists of two steps. These phases and steps are as follows:

1. Pre-Reading Phase: This phase consists of preview and question steps:

A. Preview Step

In this phase pupils are asked to:

- Preview the text by looking at the title written on the board by the teacher.
- Make prediction about the reading text.
- Survey the reading text by skimming it.

B. Question Step:

In this phase pupils are asked to:

- Ask themselves some questions to be answered in the reading text.
- Write their questions in a blank graphic organizer.
- Answer all these questions in a blank graphic organizer.

2. During - Reading Phase: This phase consists of read and reflect steps:

A. Read Step:

In this phase pupils are asked to:

- Read the passage with the goal of answering the questions they already wrote.
- Highlight important ideas or key words that will remind them of the answer in the passage.
- Write notes on a paper.
- Relate new knowledge with previous knowledge.

B. Reflect Step:

In this phase pupils are asked to:

- Reflect on what they have already read.
 - How does the information fit into things they have already learned or know?
 - What new information did they learn?
 - Did the text include the information they expected it to cover?
 - Was there information that surprised them?
- Find the questions' answer which supposed to be answered.

3. Post - Reading Phase: This phase consists of recite and review steps:

A. Recite Step:

In this phase pupils are asked to:

- Work in pairs to recall information and answer questions.
- Discuss the text with their pairs.
- Write down the main points they learned.
- Recite their notes loudly to their partners.

B. Review Step:

In this phase pupils are asked to:

- Review to make sure that all questions have been answered.
- Think about the text and discuss in pairs or write down the main points they learned.
- Explain it aloud to the teacher.
- Read the text again to confirm their answers are correct.
- Answer these questions to check their understanding of the text
- Check their answers after teacher presents the correct answers to them.

4. Evaluation:

- Read a text and answer the questions.

Groups Equivalence

The main purpose of the present research was to develop most necessary critical reading skills for 1st year prep school underachieving pupils through using PQ4R strategy. So, before implementing the suggested lessons with those pupils, a critical reading skills test was pre-administered to both the control and the experimental groups of the research.

Table 1. “T” Value of the Difference between the Mean Scores of the Experimental and Control Groups’ Pupils on the Pre-Administration of the Critical Reading Skills Test

Group	N	Mean Scores	Std. Deviation	D.F.	Calculated t-value	Tabulated T	Sig.
Control	20	7.35	2.346	38	.000	٢.٠0	Non Significant at 0.05
Experimental	20	7.35	2.368				

From table (1), the “t” calculated value at (0.01) with (٣٨) degrees of freedom was (٢.٧٠٤) and at the (0.05) level of significance with (٣٨) degrees of freedom was (٢.٠٢١). Thus, there was no statistically significant difference between the mean scores of the control and the experimental groups on the pre-administration of the test in the critical reading skills. Thus, the two groups are equivalent at critical reading skills test before the experiment.

Also, before implementing the suggested lessons with those pupils, a motivation scale was pre-administered to both the control and the experimental groups of the research. The following table shows that there was no statistically significant difference between the mean scores of the control and the experimental groups on the pre-administration of the motivation scale.

Table 2. “T” Value of the Difference between the Mean Scores of the Experimental and Control Groups’ Pupils on the Pre-Administration of the Motivation Scale

Group	N	Mean Scores	Std. Deviation	D.F.	Calculated t-value	Tabulated T	Sig.
Control	20	56.35	12.027	38	.104	٢.٠0	Non Significant at 0.05
Experimental	20	55.95	12.241				

From table (2), the “t” calculated value at (0.01) with (٣٨) degrees of freedom was (٢.٧٠٤) and at the (0.05) level of significance with (٣٨) degrees of freedom was (٢.٠٢١). Thus, there was no statistically significant difference between the experimental group pupils and the control group pupils' mean

scores on the pre-administration of the motivation scale. This proves that the two groups were almost at the same level of motivation before conducting the experiment.

Data Analysis and Results

The results of the research are discussed and interpreted in relation to the research questions and hypotheses mentioned earlier as follows:

1. 1 Answering the first sub- question

The researchers designed a checklist to identify the required critical reading skills for 1st year prep school underachieving pupils, the checklist was submitted to five jury members and they approved it. It included eight skills in its final version (see appendix 1). Thus, the first sub- question of the present research was answered.

2. Answering the second sub-question

The suggested steps for using the proposed framework of using PQ4R strategy were shown before in the preceding pages, so the second sub-question was answered. For more details, the proposed framework of the present research as a whole is shown in appendix V.

3. Answering the third sub-question

Answering the third sub-question is related to verifying the hypotheses of the current research. So, they will be dealt together as follows:

A-Results related to the first hypothesis

The first hypothesis stated that: “There is a statistically significant difference between the experimental group and the control group pupils’ mean scores on the post-administration of the critical reading skills test in favour of the experimental group”. So, the critical reading skills test was administered to the control and the experimental groups after the experimentation. Data obtained were treated statistically. Results are shown in table (3).

Table 3. “T” Value of the Difference between the Mean Scores of the Experimental and Control Groups’ Pupils on the Post-Administration of the Test

Group	N	Mean Scores	Std. Deviation	D.F.	Calculated t-value	Tabulated T	Sig.	(η^2)
Control	30	7.00	2.317	38	28.592	3.423	Significant at 0.01	0.956
Experimental	30	27.10	2.125					

The above table (3) approves the following:

1. The experimental group pupils' mean scores (27.10) was higher than the mean scores of the control group pupils (7.00) on the post-administration of the critical reading skills test. This is a highly significant difference which showed that the experimental group pupils attained remarkable higher scores than the control group pupils in the post-test. Therefore, development of the experimental group pupils' critical reading skills was due to the proposed framework using PQ4R strategy.
2. The “t” calculated value (28.592) was significantly higher than the T tabled value (3.423) with (38) degrees of freedom at the (0.01) level of significance. Thus, there was a statistically significant difference between the experimental and the control group pupils' mean scores on the post-administration of the

critical reading skills test in favour of the experimental group pupils. Thus, the first hypothesis of the research was verified.

3. η^2 of the critical reading skills test is (.906) which refers to the great effect size of using PQ4R strategy on developing critical reading skills for 1st year prep school underachieving pupils. Therefore, the third question of the present research which is “What is the effect of using PQ4R strategy on developing the most necessary EFL critical reading skills for 1st year prep school underachieving pupils? was answered.

B-Results related to the second hypothesis

The second hypothesis stated that: “There is a statistically significant difference between the experimental group’s mean scores on the pre and post-administrations of the critical reading skills test in favour of the post-administration.” So, the critical reading skills test was administered to the experimental groups before and after the experiment. Data obtained were treated statistically. Results are shown in table (4).

Table 4. “T” Value of the Difference between the Mean Scores of the Experimental Group Pupils on the Pre and Post-Administrations of the Test

Experimen tal	N	Mean Scores	Std. Deviation	D.F.	Calculated t-value	Tabulated T	(η^2)
Pre	20	7.35	2.368	38	112.316	2.039	0.999
Post	20	27.10	2.125				

The above table (4) confirms the following:

1. The experimental group pupils' mean score (27.10) was higher than the mean score of the control group pupils (7.35) on the post-administration of the critical reading skills test. This is a highly significant difference which showed that the experimental group pupils achieved outstanding higher scores in the post-test.

2. The “t” calculated value (112.316) was significantly higher than the T tabled value (2.539) with (19) degrees of freedom at the (0.01) level of significance. Thus, there was a statistically significant difference between the experimental group pupils' mean scores on the post-administration of the critical reading skills test in favour of the post-test. Thus, the second hypothesis of the research was verified.
3. η^2 of the critical reading skills test as a whole is (.999) which refers to the great effect size of using PQ4R strategy on developing critical reading skills for 1st year prep school underachieving pupils.

C- Results related to the third hypothesis

The third hypothesis stated that: “The critical reading skills are developed at different rates after using PQ4R in teaching critical reading skills in English for 1st year prep school underachieving pupils.” In order to verify this hypothesis, the mean scores of the experimental group in each critical reading skill on the pre and post-administrations of the critical reading skills performance test were calculated.

Table 5. "T" Value of the Differences between the Experimental Group Pupils Mean Scores on the Pre-and Post-Administration of the Test for Each Skill

Skills	Test	N	Mean Scores	Std. D	The calculated t	The tabulated T	D.F.	η^2																																																																																						
Distinguishing main ideas from supporting details	Pre	20	1.15	.489	22.356	٢.٥٣٩	19	0.963																																																																																						
	Post	20	3.90	.308					Identifying cause -effect relationships	Pre	20	1.30	.571	12.161	٢.٥٣٩	19	0.886	Post	20	3.70	.470	Distinguishing between facts and opinions	Pre	20	1.30	.657	16.245	٢.٥٣٩	19	0.933	Post	20	3.80	.410	Differentiating relevant and irrelevant information	Pre	20	.80	1.005	13.581	٢.٥٣٩	19	0.907	Post	20	3.90	.447	Interpreting the author's purpose	Pre	20	.70	.979	10.283	٢.٥٣٩	19	0.848	Post	20	3.40	.940	Drawing conclusions	Pre	20	.60	.940	8.850	٢.٥٣٩	19	0.805	Post	20	3.20	1.005	Summarizing the text	Pre	20	1.00	1.026	9.000	٢.٥٣٩	19	0.810	Post	20	2.80	1.005	Suggesting new titles for the text	Pre	20	.50	.889	6.892	٢.٥٣٩	19
Identifying cause -effect relationships	Pre	20	1.30	.571	12.161	٢.٥٣٩	19	0.886																																																																																						
	Post	20	3.70	.470					Distinguishing between facts and opinions	Pre	20	1.30	.657	16.245	٢.٥٣٩	19	0.933	Post	20	3.80	.410	Differentiating relevant and irrelevant information	Pre	20	.80	1.005	13.581	٢.٥٣٩	19	0.907	Post	20	3.90	.447	Interpreting the author's purpose	Pre	20	.70	.979	10.283	٢.٥٣٩	19	0.848	Post	20	3.40	.940	Drawing conclusions	Pre	20	.60	.940	8.850	٢.٥٣٩	19	0.805	Post	20	3.20	1.005	Summarizing the text	Pre	20	1.00	1.026	9.000	٢.٥٣٩	19	0.810	Post	20	2.80	1.005	Suggesting new titles for the text	Pre	20	.50	.889	6.892	٢.٥٣٩	19	0.714	Post	20	2.50	.889								
Distinguishing between facts and opinions	Pre	20	1.30	.657	16.245	٢.٥٣٩	19	0.933																																																																																						
	Post	20	3.80	.410					Differentiating relevant and irrelevant information	Pre	20	.80	1.005	13.581	٢.٥٣٩	19	0.907	Post	20	3.90	.447	Interpreting the author's purpose	Pre	20	.70	.979	10.283	٢.٥٣٩	19	0.848	Post	20	3.40	.940	Drawing conclusions	Pre	20	.60	.940	8.850	٢.٥٣٩	19	0.805	Post	20	3.20	1.005	Summarizing the text	Pre	20	1.00	1.026	9.000	٢.٥٣٩	19	0.810	Post	20	2.80	1.005	Suggesting new titles for the text	Pre	20	.50	.889	6.892	٢.٥٣٩	19	0.714	Post	20	2.50	.889																					
Differentiating relevant and irrelevant information	Pre	20	.80	1.005	13.581	٢.٥٣٩	19	0.907																																																																																						
	Post	20	3.90	.447					Interpreting the author's purpose	Pre	20	.70	.979	10.283	٢.٥٣٩	19	0.848	Post	20	3.40	.940	Drawing conclusions	Pre	20	.60	.940	8.850	٢.٥٣٩	19	0.805	Post	20	3.20	1.005	Summarizing the text	Pre	20	1.00	1.026	9.000	٢.٥٣٩	19	0.810	Post	20	2.80	1.005	Suggesting new titles for the text	Pre	20	.50	.889	6.892	٢.٥٣٩	19	0.714	Post	20	2.50	.889																																		
Interpreting the author's purpose	Pre	20	.70	.979	10.283	٢.٥٣٩	19	0.848																																																																																						
	Post	20	3.40	.940					Drawing conclusions	Pre	20	.60	.940	8.850	٢.٥٣٩	19	0.805	Post	20	3.20	1.005	Summarizing the text	Pre	20	1.00	1.026	9.000	٢.٥٣٩	19	0.810	Post	20	2.80	1.005	Suggesting new titles for the text	Pre	20	.50	.889	6.892	٢.٥٣٩	19	0.714	Post	20	2.50	.889																																															
Drawing conclusions	Pre	20	.60	.940	8.850	٢.٥٣٩	19	0.805																																																																																						
	Post	20	3.20	1.005					Summarizing the text	Pre	20	1.00	1.026	9.000	٢.٥٣٩	19	0.810	Post	20	2.80	1.005	Suggesting new titles for the text	Pre	20	.50	.889	6.892	٢.٥٣٩	19	0.714	Post	20	2.50	.889																																																												
Summarizing the text	Pre	20	1.00	1.026	9.000	٢.٥٣٩	19	0.810																																																																																						
	Post	20	2.80	1.005					Suggesting new titles for the text	Pre	20	.50	.889	6.892	٢.٥٣٩	19	0.714	Post	20	2.50	.889																																																																									
Suggesting new titles for the text	Pre	20	.50	.889	6.892	٢.٥٣٩	19	0.714																																																																																						
	Post	20	2.50	.889																																																																																										

The above table (5) shows that "t" calculated value of the eight critical reading skills varied from each other but proved to be significant at the level of (0.01).The "t" value of the first skill was (22.356), the second skill was (12.161), the third skill was (16.245), the fourth skill was (13.581), the fifth skill was (10.283), the sixth skill was (8.850), the seventh skill was (9.000), and the eighth skill was (6.892). The "t" value of each skill is more than the tabled T (٢.٥٣٩) at the level of (0.01) with (19) degrees of freedom which means that the difference is significant in each skill.

D- Results related to the fourth hypothesis

The fourth hypothesis stated: “There is no statistically significant difference between the experimental group pupils’ mean scores on the post and follow up administrations of the critical reading skills test.”

Table 6. “T” Value of the Difference between the Mean Scores of the Experimental Group Pupils on the Post and Follow Up of the Test

Test	N	Mean	Std. Deviation	D.F.	Calculated t-value	Tabulated T	Sig.
Post	20	27.10	2.125	19	.900	2.093	Non-significant at 0.01
follow up	20	27.25	2.268				

From table (6):

1. The experimental group pupils' mean score was (27.10) on the post-administration of the critical reading skills test and on the follow up administration was (27.25).
2. The “t” calculated value for the difference between the experimental group pupils' mean score on the post-administration and on the follow up administration of the critical reading skills test (.900) was lower than the tabulated t (2.093) which is not significant.

E-Results related to the fifth hypothesis

The fifth hypothesis of the research states that “There is a statistically significant difference between the experimental group and the control group pupils’ mean scores on the post-administration of the motivation for learning English scale in favour of the experimental group”. The following table shows that there was statistically significant difference between the mean scores of

the control and the experimental groups on the post-administration of the motivation scale.

Table 7. “T” Value of the Difference between the Mean Scores of the Experimental and Control Groups’ Pupils on the Post-Administration of the Motivation Scale

Group	N	Mean	Std. D.	D.F.	Calculated t-value	Tabulated T	Sig.	(η^2)
Control	20	46.55	8.739	38	32.057	۲.۴۲۳	Significant at 0.01	.۹۶۴
Experimental	20	146.50	10.865					

The above table (7) confirms the following:

1. The “t” calculated value (32.057) was significantly higher than the T tabled value (۲.۴۲۳) with (38) degrees of freedom at the (0.01) level of significance. Thus, there was a statistically significant difference between the experimental and the control group pupils' mean scores on the post-administration of the motivation scale in favour of the experimental group pupils. Thus, the fifth hypothesis of the research was verified.
2. The experimental group pupils' mean score (146.50) was higher than the mean score of the control group pupils (46.55) on the post-administration of the motivation scale. This is a highly significant difference which showed that the experimental group pupils attained remarkable higher scores than the control group pupils in the post-test. Therefore, progress of the experimental group pupils' motivation was due to the proposed framework.
3. η^2 value of the motivation scale is (.۹۶۴) and this means that %۹۶.۴ of the difference of the motivation scale which refers to the great effect size of using PQ4R strategy on increasing motivation for learning English for 1st year prep school underachieving pupils.

F-Results related to the sixth hypothesis

The sixth hypothesis stated: “There is a statistically significant difference between the experimental group’s mean scores on the pre and post-administrations of the motivation scale in favour of the post-administration ”.

Table 8. “T” Value of the Difference between the Mean Scores of the Experimental Group Pupils on the Pre and Post-Administrations of the Motivation Scale and the Effect Size of the Proposed Framework

Scale Dimensions	Test	N	Mean	Std. D	The calculated t	The tabulated T	D.F.	η^2																					
1 st dimension	Pre	20	36.45	9.902	40.309	٢.٥٣٩	19	0.988																					
	Post	20	93.10	4.973					2 nd dimension	Pre	20	19.50	3.472	26.249	٢.٥٣٩	19	0.973	Post	20	53.40	6.644	Scale as whole	Pre	20	55.95	12.241	129.097	٢.٥٣٩	19
2 nd dimension	Pre	20	19.50	3.472	26.249	٢.٥٣٩	19	0.973																					
	Post	20	53.40	6.644					Scale as whole	Pre	20	55.95	12.241	129.097	٢.٥٣٩	19	0.999	Post	20	146.50	10.865								
Scale as whole	Pre	20	55.95	12.241	129.097	٢.٥٣٩	19	0.999																					
	Post	20	146.50	10.865																									

The above table (8) indicates the following:

1. The mean score of the experimental group pupils on the post-administration of the motivation scale (146.50) was higher than their mean score on the pre-administration (55.95). Thus, a development of the experimental group pupils’ motivation was proved, due to the suggested lessons. Thus, the sixth hypothesis of the research was verified.
2. The “t” calculated value (129.097) was significantly higher than the T tabled value (2.539) with (19) degrees of freedom at the (0.01) level of significance. Thus, there was a statistically significant difference between the experimental group pupils' mean scores on the pre and post-administrations of the motivation scale in favour of the post-administration of the scale.

G-Findings related to the seventh hypothesis

The seventh hypothesis stated: “There is a statistically significant difference between the experimental group’s mean scores on the post and follow up administrations of the motivation for learning English scale.”

Table 9. “T” Value of the Difference between the Mean Scores of the Experimental and Control Groups’ Pupils on the Post and Follow up Administrations of the Motivation Scale for Learning English

Test	N	Mean	Std. D.	D.F.	Calculated t-value	Tabulated T	Sig.
Post	20	146.50	10.865	19	1.789	٢.٠٩٣	Non Significant
Follow up	20	146.85	10.864				

From table (9):

1. It was proved that the experimental group pupils' mean score was (146.50) on the post-administration of the motivation scale and on the follow up administration was (146.85).
2. The “t” calculated value for the difference between the experimental group pupils' mean score on the post-administration and on the follow up administration of the motivation scale (1.789) was lower than the tabulated t (٢.٠٩٣) which is not significant.

In summary, support was gained for all the research hypotheses. The experimental group pupils achieved tangible progress in their critical reading skills and motivation for learning English after using PQ4R strategy. Consequently, these positive results of the research proved the positive effect of using PQ4R strategy on developing the EFL critical reading skills and increasing motivation for 1st year prep school underachieving pupils.

Discussion of Results

All the hypotheses of the research were verified and the research questions were answered. Also, the research main aim, which was to develop the most necessary critical reading skills and increase motivation for learning English for 1st year prep school underachieving pupils through using PQ4R strategy, was achieved. The comparison between the experimental group and the control group showed that the development accomplished by the experimental group in the necessary critical reading skills was more than that of the control group in the post tests. The researchers attributed this development to the following aspects:

1. Using PQ4R is an effective strategy to increase pupils' engagement and develop their learning in the classroom; the researchers observed the gradual increase in pupils' engagement in classroom activities from the beginning of the programme to the end. This engagement leads to critical reading skills improvement and increase motivation for learning. This is consistent with Fatuni'mah (2015) who stressed that using PQ4R creates a pleased and attractive atmosphere during the learning process. Also, this strategy helps the students in developing their reading achievement.
2. Activating pupils' prior knowledge is very effective to help pupils pay attention and increase their participation in the learning process. This result confirmed what Wahono (2014) stated that activating pupils' prior knowledge support paying attention to teacher's explanation, asking and answering questions.
3. PQ4R strategy is useful as it helps the pupils to be more active and energetic. Pupils ask and answer questions. They read, reflect, recite and review their answers. This finding ensured what Pidiyanto (2017) mentioned as learners feel more active and have an excellent response to the PQ4R process.

4. Working in pairs and using discussion while implementing PQ4R strategy in the classroom sessions increase collaboration between the pupils and increase their motivation for learning. This is consistent with Baydas et al. (2020) who stressed that working in pairs and using discussion increase students' motivation for learning.
5. The procedures of PQ4R strategy used in the suggested framework were divided into three phases; pre, during and post reading. Each phase has its steps, objectives and activities to be dealt with. Pupils acquire learning experiences as they succeed in a specific task; they have motivation to get more encouragement and support. The instructor has a vital role as a guide and also the pupils play a dynamic role in each step.

Recommendations

In the light of this research's results, it can be concluded that the underachieving pupils who took part in the PQ4R did very well in their critical reading skills. Also, based on the results of this research, the following recommendations are proposed:

1. Critical reading skills should be given more attention in the foreign language classrooms for 1st year prep school underachieving pupils.
2. Using PQ4R to develop other language skills such as reading, listening, writing, and speaking with students in the university level.
3. Improving other language skills such as writing and speaking for 1st year prep school underachieving pupils using PQ4R.

Suggestions for Further Research

This research suggests investigating the following:

1. Using PQ4R strategy to develop students' critical thinking skills in secondary school.
2. The use of PQ4R strategy on improving other language skills (speaking and listening) for university students.
3. Using other teaching methods and strategies for developing critical reading skills among underachieving learners in different stages.

References

Abdelrasoul, M. (2014). Using reading circles strategy for developing preparatory students' critical reading skills and social skills. *Journal of Studies in Curriculum and Teaching Methods*, 204, 101-152.

Al sulami, W. (2021). The effectiveness of PQ4R strategy on the development of reading comprehension skills of the English language course among second intermediate grade students (Female Students). *Journal of Educational and Psychological Sciences*, 5(8), 123-138 .

Al-Bari, Z., Ibrahim, F. (2017). The effect of using communication strategies on the achievement of first-intermediate female students and developing their motivation to learn English. *Journal of the College of Basic Education*, 23(97), 1-39.

Alizadeh, M. (2016). The impact of motivation on English language learning. *International Journal of Research in English Education*, 1(1), 11-15.

Aljboor, M. A. (2021). The effect of using PQ4R instructional strategy on enhancing Jordanian tenth graders' reading fluency. *The Islamic University Journal of Educational and Psychology Studies*, 29(3), 851 – 864.

Al-Meshr, A. (2012). A suggested strategy based on the language experience approach to develop Libyan secondary stage students' critical reading and writing skills. *Journal of Scientific Research in Education*, 13 (4), 2157-2180.

Al-Qawabeh, R. H., & Aljazi, A. A. (2018). The effectiveness of using PQ4R strategy in teaching reading comprehension in Arabic language subject among ninth grade students' achievement in Jordan. *World Journal of Educational Research*, 5(2), 159-171.

AlShamali, A. (2017). The effect of the using PQ4Rs strategy on the development of reading comprehension skills and reflective thinking among 5th grade student in South Hebron Directorate. Unpublished Master Thesis, Al-Quds University, Palestine.

Al-Zoubi, S. M., & Younes, M. A. B. (2015). Low academic achievement: Causes and results. *Theory and Practice in Language Studies*, 5(11), 2262- 2268 .

Antao, D., & Principal, O. (2019). Academic underachievement: A social challenge. *IJRAR-International Journal of Research and Analytical Reviews (IJRAR)*, 6(2), 820-825.

Batubara, F., Derin, T., Putri, N. S., & Yudar, R. S. (2020). Five factors influencing the students' motivation to learn English as a foreign language: a closer look into Montessori classroom environment. *REiLA: Journal of Research and Innovation in Language*, 2(2), 76-84.

Baydas Onlu, O., Abdusselam, M. S., & Yilmaz, R. M. (2020). Interaction between Group Work, Motivation and Instructional Feedback in Project-Based Courses. *ie: inquiry in education*, 12(1), 1-26.

Bedau, H., & Barnet, S. (2011). *Critical thinking, reading, and writing: A brief guide to argument*. Bedford/St. Martin's: New York/Boston.

Bibi, R., & Arif, M. H. (2011). Effect of PQ4R study strategy in scholastic achievement of secondary school students in Punjab (Pakistan). *Language in India*, 11(12), 247-267.

Carman, L. K. (2015). *Low-achieving students' perspectives regarding their experiences as recipients of instructional support delivered in a general education setting*. Rutgers the State University of New Jersey-New Brunswick.

Chalak, A., & Kassaian, Z. (2010). Motivation and attitudes of Iranian undergraduate EFL students towards learning English. *GEMA online journal of language studies*, 10(2), 37-56.

Choosri, C. (2014). *Relationship between motivation and students' English learning achievement: A study of the second-year vocational certificate level Hatyai Technical College Students*.

Dilshad, M., Nausheen, M., & Ahmed, Z. (2019). Impact of students' motivation for learning English on their achievement at secondary level. *Pakistan Journal of Social Sciences (PJSS)*, 39(2), 689-696.

Diman, H., Jusnita, N., Dahlan, S., & Daud, A. H. (2020). Students' competence in critical reading. *Jurnal Bilingual*, 10(2), 32-37.

Dörnyei, Z., & Ushioda, E. (2013). *Teaching and researching: Motivation*. New York: Routledge.

Dorra, R., Dadour, M., & El-bashbishy, R. (2020). Developing students' critical reading skills through GDS. *Reading & Knowledge Magazine*, 229, 1-16.

El-Bassuony, J., Mohaseb, M., & Moussa, M. (2020). The effectiveness of personalized learning model in developing intensive English reading skills among preparatory stage pupils. *Faculty of Education Journal Port Said*, 32(32), 748-770.

El-Garawany, M. S. (2018). Using Webspiration to develop preparatory stage pupils' EFL critical reading skills. *Journal of Research in Curriculum Instruction and Educational Technology*, 4(1), 99-137.

Fachraini, S. (2017). An analysis of students' motivation in studying English. *Getsempena English Education Journal*, 4(1), 47-57.

Facione, P. A. (2011). *Critical thinking: What it is and why it counts*. Insight assessment, 2007(1), 1-23.

Facione, P. A. (2015). *Critical thinking: What it is and why it counts (Sixth edition)*. California: Measurement Reason LCC and Insight Assessment.

Fatimah, S. (2016). The use of PQ4R to improve students' reading comprehension (A Classroom Action Research at the Eleventh Year Students of MAN Salatiga in the Academic Year of 2015/2016) (Doctoral dissertation, IAIN SALATIGA).

Fatuni'mah, A. (2015). Teaching reading narrative text through PQ4R (Preview, question, read, reflect, recite, and review) strategy (An experimental research at the ninth grade of SMP Ma'arif NU 02 Jatinegara in the academic year of 2015/2016). Unpublished Master Thesis, Walisongo State Islamic University, Indonesia.

Fauziah, N. A. (2021). The effect of using pq4r (preview, question, read, reflect, recite, review) in teaching reading comprehension. In *Prosiding Seminar Nasional Pendidikan Universitas Subang (SENDINUSA)*, 3(1), 317-322.

Femilia, P. S. (2018). Critical reading strategies employed by good critical readers of graduate students in ELT, State University of Malang. *TEFLA Journal (Teaching English as Foreign Language and Applied Linguistic Journal)*, 1(1), 30-34.

Guo, W., & Bai, B. (2022). Effects of self-regulated learning strategy use on motivation in EFL writing: A comparison between high and low achievers in Hong Kong primary schools. *Applied Linguistics Review*, 13(1), 117-139.

Harjali, H. (2017). Meaning of Developing Student Centered Classroom Environment. *JPI (Jurnal Pendidikan Indonesia)*, 6(2), 134-140.

Hassan, S. (2016). The effect of using visible thinking routines to enhance EFL critical reading skills of secondary stage students and their engagement in reading. *Faculty of Education Journal, Kafrelsheikh University*, 16 (6), 1 - 70.

Hong, Y. C., & Ganapathy, M. (2017). To investigate ESL students' instrumental and integrative motivation towards English language learning in a Chinese School in Penang: Case study. *English Language Teaching*, 10(9), 17-35.

Huang, Y. M., & Huang, Y. M. (2015). A scaffolding strategy to develop handheld sensor-based vocabulary games for improving students' learning motivation and performance. *Educational Technology Research And Development*, 63(5), 691-708.

Humaida, I. (2012). Motivation to learn among English language learners in Sudan. *Open access scientific reports*, 1(4), 1-8.

Idiege, K. & Cecilia, O. (2018). Relative efficacy of PQ4R metacognitive learning strategy on students' academic achievement in electrochemistry in Calabar Education Zone, Cross River State, Nigeria. *International Journal of Advanced Academic and Educational Research*, 13 (3), 50 – 61.

Khodary, M. M., & AbdAllah, M. M. (2014). Using a WebQuest model to develop critical reading achievement among languages and translation department students at Arar College of Education and Arts. *International Interdisciplinary Journal of Education*, 3(11), 246-256.

Khumaira, K., Ngadiso, N., & Sujoko, S. The Effectiveness of Using PQ4R Method on Teaching Reading Viewed From Students' Intelligent Quotient (IQ). *English Education*, 6(2), 129-135.

Khusniyah, N. L. (2018). The impact of PQ4R strategy use on EFL students' English reading comprehension. *EDULANGUE*, 1(2), 166-177.

Kusiak-Pisowacka, M. (2020). Developing critical reading skills: A coursebook evaluation study. *Symposia Melitensia*, 16, 195-204.
<https://www.um.edu.mt/library/oar/handle/123456789/53747>

Legault, L. (2020). Intrinsic and extrinsic motivation. *Encyclopedia of Personality and Individual Differences*, 2416-2419.

Long, C., Ming, Z., & Chen, L. (2013). The study of student motivation on English learning in junior middle school--A Case Study of No. 5 Middle School in Gejiu. *English Language Teaching*, 6(9), 136-145.

Majumdar, R., Bakilapadavu, G., Majumder, R., Chen, M. R. A., Flanagan, B., & Ogata, H. (2021). Learning analytics of humanities course: Reader profiles in critical reading activity. *Research and Practice in Technology Enhanced Learning*, 16(1), 1-18.

Manarin, K., Carey, M., Rathburn, M., & Ryland, G. (2015). *Critical reading in higher education: Academic goals and social engagement*. Indiana University Press.

Marisa, T., Monalisa, M., & Abadi, A. (2019). *The effect of PQ4R method toward student's reading comprehension on the eighth grade students of Madrasah Tsanawiyah Negeri 1 Kota Jambi* (Doctoral dissertation, Uin Sulthan Thaha Saifuddin Jambi).

Mohamed, F., Ismail, A., & Abdel Aziz, S. (2022). *Preparatory school gifted EFL students' mastery of critical reading skills: An evaluative study*. *Sohag University International Journal of Educational Research*, 5(5), 25-37.

Mohammed, M. K. (2014). *The effect of using s WebQuest model to develop critical reading performance among general secondary stage students in Egypt*. *Arabian Universities libraries for education and psychology, Damascus university*, 12(4), 1-42.

Musa, N. C., Lie, K. Y., & Azman, H. (2012). *Exploring English language learning and teaching in Malaysia*. *GEMA Online Journal of Language Studies*, 12(1), 35-51.

Nguyen, H. C. (2019). *Motivation in learning English language: A case study at Vietnam National University, Hanoi*. *European Journal of Educational Sciences*, 6(1), 49-65.

Orhan Özen, S. (2017). *The effect of motivation on student achievement*. In *The factors effecting student achievement*. Springer International Publishing AG, 35-56 . DOI 10.1007/978-3-319-56083-0_3.

Par, L. (2018). *The EFL students' critical reading skills across cognitive styles*. *JEELS (Journal of English Education and Linguistics Studies)*, 5(1), 73-96.

Pidianto, A. (2017). *The effectiveness of PQ4R method to the eighth grade students' reading comprehension of SMP Muhammadiyah Kediri in the Academic Year 2016/2017 (Skripsi)*. University of Nusantara PGRI Kediri.

Purnama, N. A., Rahayu, N. S., & Yugafiati, R. (2019). Students' motivation in learning English. *PROJECT (Professional Journal of English Education)*, 2(4), 539-544.

Radfar, Z. H., & Lengkanawati, N. S. (2020). Exploring the motivation of English language learning students in Indonesia. In *4th Asian Education Symposium (AES 2019)*, 438, 116-118.

Rahmadia, P., & Fatimah, S. (2021). The effectiveness of implementing PQ4R models on improving students' reading comprehension. In *Eighth International Conference on English Language and Teaching (ICOELT-8 2020)*, 579, 295-299.

Rahman, F. (2018). The constraints of foreign learners in reading English literary works: A Case Study at Hasanuddin University. *Journal of Arts and Humanities*, 7(2), 01-12.

Rehman, A., Bilal, H. A., Sheikh, A., Bibi, N., & Nawaz, A. (2014). The role of motivation in learning English language for Pakistani learners. *International Journal of Humanities and Social Science*, 4(1), 254-258.

Rizk, A. R. (2021). Using graphic organizers (GOs) for developing EFL critical reading skills among first year secondary stage students. *Educational and Psychological Studies Faculty of Education Journal, Zagazig University*, 36 (111), 269-315.

Salem AlSereidi, M. A. (2019). Exploring critical reading experience in English of Emirati 11th grade students. PhD United Arab Emirates University. https://scholarworks.uaeu.ac.ae/all_dissertations/107.

Samperio, N. (2019). Learning strategies used by high and low achievers in the first level of English. *Profile Issues in Teachers Professional Development*, 21(1), 75-89.

Sari, B. (2019). Students' motivation in English language learning viewed from Gardner theory (A Survey Study at Second Years Students of TBI IAIN Bengkulu in Academic Year 2018/2019) (Doctoral dissertation, IAIN Bengkulu.)

Shoab, M., Inamullah, H. M., Irshadullah, H. M., & Ali, R. (2016). Effect of PQ4R strategy on slow learners' level of attention in English subject at secondary level. *Journal of Research & Reflections in Education (JRRE)*, 10(2), 100-114.

Siska, S. (2015). Using film to increase motivation for speaking in English course classroom. *Tell-Us Journal*, 1(2), 51-57.

Sultan, S., Rofiuddin, A., nurhadi, N., & Priyatni, E. (2017). The effect of the critical literacy approach on pre-service language teachers' critical reading skills. *Eurasian Journal of Educational Research*, 17(71), 159-174.

Tang, L. H. (2016). A study of effective strategy training for low achievers in college English listening teaching. In 3rd International Conference on Advanced Education and Management(ICAEM 2016). Retrieved from <https://pdfs.semanticscholar.org/b763/3594f4bb602b1a2bfa38e545cef1f6e756ba.pdf>.

Wahono, S. S. (2014). Using PQ4R to increase the students' reading comprehension at Al-Bidayah Islamic Boarding School Jember. *Journal Fenomena*, 13(2), 121-132.

Wahyuningsih, A., & Kiswaga, G. E. (2019). The effectiveness of CIRC learning model and PQ4R learning model on reading comprehension skills of elementary school students. *Jurnal Prima Edukasia*, 7(1), 82-93.

Widesti, H. (2016). Motivation in English language learning of English Department Fresh Year Students. Universitas Kristen Satya Wacana.

Yang, Y. T. C., & Wu, W. C. I. (2012). Digital storytelling for enhancing student academic achievement, critical thinking, and learning motivation: A year-long experimental study. *Computers & education*, 59(2), 339-352.

Yildirim, S., & Soylemez, Y. (2018). The effect of performing reading activities with critical reading questions on critical thinking and reading skills. *Asian Journal of Education and Training*, 4(4), 326-335.