# Impact of Pre-reading Strategies on Secondary School Students' English Reading Comprehension Skill: An Experimental Study in Pakistani Context

**Dr. Imran Ahmed**
*Assistant Professor, Govt. Premier College, Karachi, Sindh Education & Literacy Department, Pakistan*
*4ahmedimran@gmail.com*

**Dr. Kamran Ali**
*Associate Professor, Hamdard University, Karachi. Department of Social Science and Humanities*
*kamran.arsal@hamdard.edu.pk*

**Dr. Munawer sultana**
*Assistant professor, Hamdard University Department of Social Science and Humanities*
*munawer.sultana@hamdard.edu.pk*

## Abstract

*This study experimented impact of pre-reding strategies on English reading comprehension of secondary level students at public sector schools. It was a quasi-experimental study, which was conducted in two secondary schools of Karachi, Pakistan. It followed pretest posttest approach based on experimental and controlled group. Each of the group had 48 individuals. The tested strategies were related to i) activating prior knowledge, ii) previewing text, iii) predicting and, iv) self-questioning. The data was analyzed using SPSS and independent sample -t test. Results of the study showed that the experimental group that employed pre-reading strategies outperformed in English reading comprehension test than the control group, which employed traditional reading comprehension approach.*

***Index Terms:*** *Reading comprehension, pre-reading strategies, background knowledge, previewing, predicting and, self-questioning.*

## Introduction

Pakistani public sector schools English reading comprehension skills employed in Pakistani public sector schools, is one of the reasons behind students' poor performance in English reading comprehension skills (Sultana & Zaki, 2015; Sarwar, Ahmad & Hyder, 2017; Yasmin, 2018; Fareed, Jawed, & Awan,2018; Idris, 2019; Anjum, Pathan, & Shah, 2021; Ali, 2021).  One can witness this is a stumbling block in attaining independency in comprehension skills (Younus, & Khan, 2017). Reading comprehension in English is the key to success in academic endeavors. Interactive reading strategies basically are the tools to ensure making readers independent in the comprehension process. (Imawan & Ashadi, 2019; Nurjanah, & Pratama 2020).

The current study experimented the effectiveness of pre-reading strategies at public sector schools of Karachi amongst the students of grade 10 to analyze the comprehension hurdles these students encounter. Reading comprehension is built upon cognitive, linguistic and socio-cultural factors, which demands consideration of effective teaching plans, cemented with effective reading strategies. Therefore, the provision for interactive reading strategies is indispensable for these students. Pre-reading strategies are believed to be effective in dealing with reading comprehension hurdles (Alenizi, 2019).

## Literature Review

Reading comprehension in English is an integral part of academic process for Pakistani pupils. It is a challenging task, yet the gap between deficiency and the desired level of proficiency can be bridged through interactive reading approach. In this connection some of the pre-reading strategies were suggested for secondary level students of public sector schools. At pre-reading stage an instructor or teacher facilitates readers to realize what they should expect and learn from the reading text. They are motivated to get the gist and concept of the reading text. This is a significant stage which helps readers develop and stimulate their schema. This stage is comprising of different strategies that are implicitly or explicitly taught or introduced by trained teachers. The pre-reading strategies are consisting of 1) activating prior knowledge,2) previewing text,3) predicting and,4) self-questioning. There is a profound relation between pre-reading strategies and comprehension skills. Pre-reading strategies are the solutions to the problems that hinder comprehension. This phase prepares readers providing them purpose of reading. It stimulates readers' prior knowledge and activates their schema about the reading

topic.These strategies guarantee to boost readers level of interest in the text for deeper grasp of the reading text through allocated time with text. Hence, it is instructor job to ensure smooth transition of readers with the text. Previous researches of Rubegni and Landoni, (2018), also lay stress on using pre-reading strategies to operationalize readers' background knowledge to help understand similar text. These are basically cognitive skills. These skills bridge readers' background knowledge and the new knowledge.

**Activating Prior Knowledge**

Making connection to bridge the gap between known to unknown is indispensable. For this purpose, activating prior knowledge requires between the unknown and the known concepts. It is based upon schema, which develops new information through connecting it with the previously learnt concepts to comprehend new knowledge. According to Thuy, & Huan, (2018) schema is an abstract structure in the mind of the reader, based on past experiences. Schema in the context of reading, refers conceptual understanding and experiences students brings to a textual context. Schemata is said to have a positive correlation with reading comprehension. For example, Jarrah, & Ismail, (2018) claims that students can comprehend any reading text provided they apply prior schemata to develop the meaning. Riahi, & Pourdana, (2017) second the notion that prior knowledge or experience supports readers to construct meanings successfully. Another study by Alhaysony (2017) covers that prior knowledge is pre-requisite for reading. It scaffolds the reading content making it easier to understand.

**Previewing**

One of the pre-reading techniques that helps readers create textual hypotheses is previewing. It is done by using headings, titles, and text-related images that summarises the content of the text (Boardman, Vaughn, & Klingner, 2018; Reed, Stevenson, & LeBeau, 2019). Previewing involves guessing prior reading the text to assure whether the required information is available. It involves title guessing, quick reviewing figures, graphs, charts, diagrams, the contents, headings of chapters etc. It clues the reader to know what a text is all about. According to Samimi, & Sahragard, (2018) this strategy saves readers time and takes them to the specific information in a short span of time.

**Predicting**

Predicting is a reading skill, which deals with guessing activity. It involves thinking forward and anticipating events and information in the reading text. According to Hani, (2020) students at every stage depend heavily on the prediction on the basis of syntactic and semantic clues and schema.

**Self-questioning**

In order to verify one's own interpretation of the reading material, self-questioning is to question oneself about the on-read material. According to Rusmiati (2016) good readers use self-questioning strategies to comprehend implied, functional connections that lead to the entire sense of the reading text.

Pre-reading activities are the sources of developing readers interest in the text besides activating their schema. At this stage reader should handle the reading assignment happily. Therefore, teachers are required to implement them. It is evident that if a teacher spears sufficient time at this stage in order to get better results. This phase also develops readers' motivational level, which facilitates in better comprehending text. Therefore, the greater the sessions the better the results. Mousavian, & Siahpoosh, (2018) urge that to develop schema about the reading topic is indispensable. Puspitasari, (2018) exposed the primitive practice for dealing with comprehension tasks where readers went through a text individually or by the instructor and completed the follow up tasks, which resulted faulty comprehension and this is what exactly happening in Pakistani public schools now.

According to Asmara, (2019) schema about the topic is crucial for readers. Pre-reading strategies enhance comprehension skill. They help to focus and prepare readers for the reading task. They let the reader connect new information available in the text to their background knowledge. Readers must be trained to connect this new knowledge into their existing understanding of the world.

One of the pre-reading techniques that helps readers create their schema is to have them write about their experiences connected to the reading subjects (McGraw & Mason, 2017). Students investigate what they may encounter in the next text at this reading level. This method also creates new vocabulary. Likewise, title-based queries, typically offered as a pre-reading component, encourage and enlist children in reading activities. They aid readers in making predictions about what will happen in the content they are reading. In order to optimize

comprehension, these questions also demonstrate their links (Karimi & Baradan, 2017). Iranian students were the subjects of pre-reading activity experiments by Hashemi (2016). To investigate the effects of pre-reading activities, the population was divided into four groups: one control group, three experimental groups, and one group for study. According to his research, every treatment group that used pre-reading techniques outperformed the non-treatment group in comprehension. Pre-reading instruction helps students engage in and apply critical reflection while they read, according to a recent study conducted in the Kingdom of Saudi Arabia (KSA) (Abdelhalim, 2017). Pre-reading techniques help readers maintain the mental and behavioral activity necessary for good comprehension (Alhawsawi and Roomy, 2019). Furthermore, Mousavian et al. (2018) support the idea that pre-reading exercises are useful tools for assisting students with their academic work. A study in the Middle East ponders that pre-reading strategies facilitates in comprehension by connecting the readers with the topic, language style and vocabulary of the text (Torres, 2017). Effectiveness of the pre-reading strategies have been examined on the large scale. Offorma, & Chibiko (2020) shared the findings of pre-reading activities in senior secondary school, which suggest that pre-reading activities helped the readers and teacher exceeding for successful comprehension task. Salbego, & Osborne, (2016) also shared the results of pre-reading activities on EFL Moccoran College Students. According to him readers who were facilitated in vocabulary definitions and class discussion produced better results.

A similar study on Iranian students by Hashemi (2016) defines pre-reading role on comprehension success. The findings of the experiment suggest that the treatment group who employed the pre-reading techniques were far better in their comprehension than the controlled group. A contemporary study in KSA on the similar topic suggest these strategies helped students in stimulating and utilizing critical reflection during reading and engaging with texts (Abdelhalim, 2017). Roomy, et al., (2019) suggest that pre-reading activities facilitate students cognitively and behaviorally to be focused on the task. Protacio (2017) suggests that pre-reading activities motivate readers and engage them in successful comprehension. Mousavian, et al., (2018) advocate the power of pre-reading activities for comprehension. They prove that these are effective gears to help readers. Their study proved that the learners who experienced pre-reading activates outperformed than the students of controlled group. Therefore, the above studies

establish that pre-reading strategies have significant impact on students reading comprehension skills.

Figure 1.

*Types of Cognitive Strategies (Pre-reading Skill)*
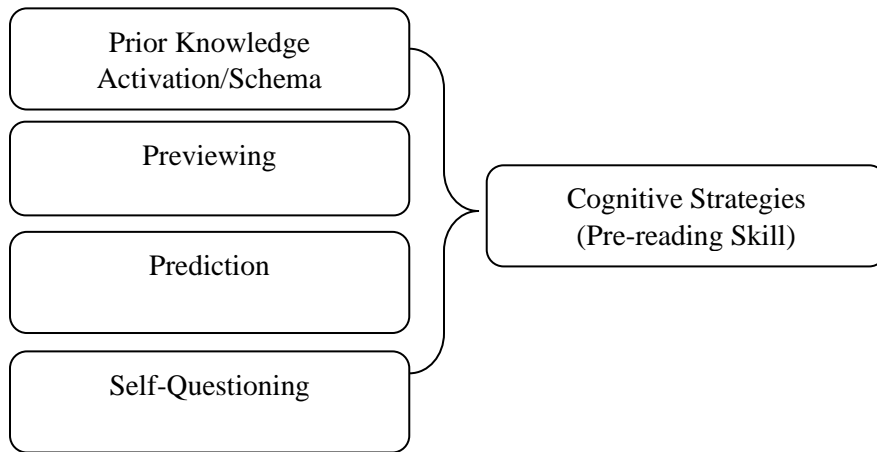


## Research Objectives:

1. To explore the effectiveness of pre-reading strategies in the development of reading comprehension skill of public secondary schools' students of Karachi.

2. To highlight the significance of teaching pre-reading skill through interactive reading strategies.

## Hypothesis:

- H: Pre-reading strategies have positive impact on English reading comprehension skills of public secondary schools' students of Karachi.

## Methodology

Due to its nature, this research is quasi-experimental and is based on a pretest-posttest experiment that was structurally based on the suggested structure (Ary, Jacobs, Irvine, & Walker, 2018). The study included two participant groups: one received interactive reading treatment, where pre-reading strategies were used to help the group develop reading comprehension skills, and the other received traditional instruction in reading comprehension skills. In all, 96 male students in grade ten (X) from two distinct public schools located in District Korangi, Karachi,

were present. These students' ages varied from fifteen to seventeen years old. Each group taught three times a week for ninety minutes each day. The Sindh Text Book Board, Jamshoro for grade X, utilized in setting research tool to evaluate students' reading comprehension following the application of pre-reading techniques. The examinations were given twice: once as a pretest and once as a posttest. There were prose and poetry sections on the test, and there were 11 questions total that needed to be answered in 2.5 hours. Prior to this, the test was piloted to determine its validity and reliability.

## Data Analysis

The data analysis process started by conducting a careful review and analysis of the pretest posttest results. It was carefully marked and analyzed through SPSS. The significant difference between the experimental and controlled groups if existed any, determined through pretest to assure the impact of proposed method of teaching reading skills to the both groups. For this purpose, a pretest was designed which was tested for its reliability and validity as well. Prior the experiment took place, the inter coder reliability and validity was checked for the same test. The test paper consisted on seven pages, based on prose and poem which were exerted from the prescribed text book for the students published by Sindh text book board Jamshoro. The test was designed using interactive approach and activities were based on pre-reading strategies. Once the instrument was piloted for its validity and reliability. A pretest was conducted with both the groups, which shows the following results.

Table 1

Comparison of Experimental and Control group in Pretest

| Factors | Group | N | Mean | Sd | df | t | P |
|---------|-------|---|------|-----|-----|-----|-----|
| Pre-reading | Experimental | 48 | 7.02 | 2.884 | | | |
| | Control | 48 | 7.85 | 3.632 | 94 | -1.245 | 0.216 |

*$*p<0.05$*

An independent sample t-test was conducted to assure the level of the experimental and control group in English reading comprehension skill through pretest. Results of the study showed that there was no significant difference between the results of the both groups. The t value is (94) = -1.245, and the p = 0.216. Average mean from experimental group is (M=7.02, SD=2.884) as compared to the average mean from control group (M=7.85, SD=3.632).

Table 2

A one-way Anova was conducted to compare the Pretest results in English reading comprehension skills of the both groups.

| ANOVA (*Pretest*) | Sum of Squares | df | Mean Square | f | Sig. |
|---|---|---|---|---|---|
| Between Groups | 6633.375 | 1 | 6633.375 | 377.311 | .000 |
| PrereadingWithin Groups | 1652.583 | 94 | 17.581 | | |
| Total | 8285.958 | 95 | | | |

A one-way ANOVA was conducted to compare the pretest results of students in English RC skill of the experimental and controlled groups of public secondary school. An analysis of variance showed that there is a significant difference between results of English pre-reading skills, $F(1, 94) = 377.311$, p (0.000).

Table 3

Comparison of Experimental and Control group in Posttest

| Factors | Group | N | Mean | Sd | df | t | P |
|---|---|---|---|---|---|---|---|
| Pre-reading | Experimental | 48 | 24.17 | 3.539 | | | |
| | Control | 48 | 7.54 | 4.758 | 94 | 19.424 | 0.000* |

*\*p<0.05*

An independent sample t-test was conducted to evaluate that there is significant difference between experimental and control group in posttest results of students in English reading comprehension skill. The test was significant, $t(94) = 19.424$, p=0.000. Results of the study showed that there was significant difference among results of experimental and control group in posttest. Average mean of experimental group (M=24.17, SD=3.539) as compared to the average mean of control group (M=7.54, SD=4.758).

Table 4

*A one-way Anova was conducted to compare the Posttest results in English RC of the both groups.*

| ANOVA (*Posttest*) | Sum of Squares | df | Mean Square | f | Sig. |
|---|---|---|---|---|---|
| Between Groups | 6633.375 | 1 | 6633.375 | 377.311 | 0.000* |
| Pre-reading  Within Groups | 1652.583 | 94 | 17.581 | | |
| Total | 8285.958 | 95 | | | |

## Discussion

The research questions and hypothesis are very much in line with pretest and posttest results. The test was designed using interactive reading approach and activities were based on pre-reading approach. The experimental group was taught using interactive strategy-based approach, while controlled group was taught the same lessons, though the strategy employed was traditional one for them. The data was analyzed through SPSS. The results were compared through independent Sample t-test and one-way Anova test. The data revealed significant improvements in experimental group results, which was taught through interactive reading strategies.

The independent sample t-test evaluated the difference between experimental and control group in pretest, where the tabled shows, t (94) =0.743 and p=0.460. Average mean from experimental group is (M=26.63 and SD=8.804) as compared to the average mean from control group (M=25.15and SD=10.269). Hence, it was established that there was no significant difference between the skills and capabilities of the both groups. A one-way ANOVA compared the pretest results of the both groups. An analysis of variance showed that there is a significant difference between results of English PR skills, F (1, 94) =377.311, p (0.000),

Finally, the independent sample t-test evaluated the pre-reading results of students in posttest. The test was significant, t (94) =19.424 and p=0.000. Average mean from experimental group (M=24.17 and SD=3.539) as compared to the average mean from control group (M=7.54, SD=4.758).

A one-way ANOVA was conducted to compare the posttest results. An analysis of variance showed that there is a significant difference between results of pre-reading skills, F (1, 94) =377.311, p (0.000).

## References

Abdelhalim, S. M. (2017). Developing EFL students' RC and reading engagement: Effects of a proposed instructional strategy. *Theory and Practice in Language Studies*, *7*(1), 37-48.

Al Roomy, M., & Alhawsawi, S. (2019). Understanding RS of EFL Saudi Students. *English Language Teaching*, *12*(6), 33-44.

Alenizi, M. A. K. (2019). Effectiveness of a program based on a multi-sensory strategy in developing visual perception of primary school learners with learning disabilities: a contextual study of Arabic learners. *International Journal of Educational Psychology*, *8*(1), 72-104.

Alhaysony, M. (2017). Language learning strategies use by Saudi EFL students: The effect of duration of English language study and gender. *Theory and Practice in Language Studies*, *7*(1), 18-28.

Ali, N. A. S. (2021). The impact of story pyramid strategy on university students' reading comprehension performance level. Materials Today: Proceedings.

Al-Jarrah, H., & Ismail, N. S. B. (2018). RC Difficulties Among EFL Learners in Higher Learning Institutions. *International Journal of English Linguistics*, *8*(7),32-41.

Anjum, S., Pathan, H., & Shah, W. A. (2021). Teaching English through Critical Pedagogy (CP): Challenges and Coping Strategies in Pakistani EFL Classrooms.

Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2018). *Introduction to research in education*. Cengage Learning.

Asmara, R. M. (2019). *The influence of PR activities on RC skill in high school level: A pre-experimental study at the tenth-grade students of SMAN 21 Garut* (Doctoral dissertation, UIN Sunan Gunung Djati Bandung).

Ayub, A., Akram, Z., & Khurshid, K. (2017). Effectiveness of Phonetic Instructions in improving pronunciation Abilities and Reading Skills at Elementary Level: A Case Study of Primary Private School Students. Journal of Elementary Education, 27(1), 83-93.

Boardman, A., Vaughn, S., & Klingner, J. (2018). Teaching Collaborative Strategic Reading (CSR) to Students with Learning Disabilities. *From Floundering to Fluent: Reaching and Teaching Struggling Readers*, 83.

Bormanaki, H. B., & Khoshhal, Y. (2017). The role of equilibration in Piaget's theory of cognitive development and its implication for receptive skills: A theoretical study. *Journal of Language Teaching and Research*, *8*(5), 996-1005.

Fareed, M., Jawed, S., & Awan, S. (2018). Teaching English language at SSC level in private non-elite schools in Pakistan: Practices and problems. *Journal of Education and Educational Development*, *5*(1), 80-95.

Hani, U. (2020, February). Previewing and Predicting on Students" Reading Assignment (A Case Study in the Second Semester). In *Proceedings* (Vol. 1, No. 1).

Hashemi, A. (2016). The Impact of Information and Communication Technology (ICT) on Teaching English to College Students. *Efl Journal*, *1*(3), 203-218.

Idris, M. (2019). Developing the Reading Comprehension by Using Grammar Translation Method.

Imawan, M. R., & Ashadi, A. (2019). Audiobooks for assisting EFL Students in reading independently. *Journal of English Language Teaching and Linguistics*, *4*(1), 77.

Karimi, M., & Baradan, A. (2017). The Comparative Effect of Teaching Collaborative Strategic Reading and Metacognitive RS on EFL Learners' RC.

McGraw, A., & Mason, M. (2017). Reading as an imaginative act: Strategies for reading. *Idiom*, *53*(3), 50.

Mousavian, S., & Siahpoosh, H. (2018). The Effects of Vocabulary Pre-teaching and Pre-questioning on Intermediate Iranian EFL Learners' Reading Comprehension Ability. *International Journal of Applied Linguistics and English Literature*, *7*(2), 58-63.

Nurjanah, R. L., & Pratama, M. R. A. (2020). Self-Regulated Learning Strategy Instructions in Reading Comprehension Skill Learning During Outbreak Era. *JELTL (Journal of English Language Teaching and Linguistics)*, *5*(2), 191-201.

Offorma, E. K. O., & Chibiko, G. (2020). Combined Effects of Pre-reading Activities and Location on Senior Secondary Students' interest In French Oracy. *Journal of The Nigerian Academy of Education*, *14*(2).

Protacio, M. S. (2017). A Case Study Exploring the Reading Engagement of Middle Grades English Learners. *RMLE Online*, *40*(3), 1-17.

Puspitasari, L. (2018). Improving Students' of Narrative Text Through Reciprocal Teaching Technique at The First Grade Students of Sma Negeri 1 Way Pengubuan.

Reed, D. K., Stevenson, N., & LeBeau, B. C. (2019). RC Assessment: The Effects of Reading the Items Aloud Before or After Reading the Passage. *The Elementary School Journal*, *120*(2), 300-318.

Riahi, Z., & Pourdana, N. (2017). Effective RC in efl contexts: Individual and collaborative concept mapping strategies. *Advances in Language and Literary Studies*, *8*(1),51-59.

Rubegni, E., & Landoni, M. (2018, April). How to design a digital storytelling authoring tool for developing PR and pre-writing skills? In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (pp. 1-10).

Rusmiati, R. (2016). An Overview of the Implementation of Pre-Questioning Strategy in Teaching Reading. *Getsempena English Education Journal*, *1*(1), 217655.

Salbego, N., & Osborne, D. M. (2016). Schema activation through PR activities: teaching proverbs in L2. *BELT-Brazilian English Language Teaching Journal*, *7*(2), 175-188.

Samimi, F., & Sahragard, R. (2018). On the Validation of a Preliminary Model of Reading Strategy Using SEM: Evidence from Iranian ELT Postgraduate Students. *Research in Applied Linguistics*, *9*(1), 105-126.

Sarwar, S., Ahmad, N., & Hyder, S. I. (2017, November). Academic writing deficiencies of business management students: causes, effects and solutions. In Proceedings of ICERI2017 Conference, 16th-18th November.

Sultana, M., & Zaki, S. (2015). Proposing Project Based Learning as an alternative to traditional ELT pedagogy at public colleges in Pakistan. International Journal for Lesson and Learning Studies.

Thuy, N. T. B., & Huan, N. B. (2018). The Effects of Question-Answer Relationship Strategy on Efl High School Students' RC. *European Journal of English Language Teaching*.

Torres, D. B. (2017). Effectiveness and Students' Perception of the Use of PR Strategies and Summaries: A Case Study of Adult EFL Students in a RC Course. *Revista de Lenguas Modernas*, (27).

Yasmine, F. N. (2018). The Effectiveness of Using Picture Books on The Second Grade Students'reading Ability in Junior High School 3 Kedungwaru Tulungagung.

Younus, M., & Khan, I. (2017). The effects of strategy-based reading instruction on RC and reading strategy use. *Journal of Education & Social*, 106-120.