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The Effects of Metacognitive Strategies on Reading Comprehension of ESL Students

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Abstract

In Pakistan, English holds prestige as an official language. Being the language of instruction, reading comprehension of the English language is crucial in the development of critical thinking and equips learners to understand complex content. In this regard, metacognition can help the learner by understanding their thinking and improving their learning processes. Many studies show that by applying metacognitive strategies, students can develop their critical reading skills to comprehend advanced reading material. However, without correct application and understanding of the process, teachers and students remain in want of achieving results. This article explores the development of reading comprehension of ESL students by implementing meta-cognitive strategies in the students of the M.A. English programme. The aim is to explore the relationship between metacognitive strategies (planning, monitoring and evaluating) and reading comprehension, and how metacognitive awareness has a direct impact on the reading comprehension of ESL students

Key Words: Language, Metacognition, Metacognitive Strategies, Reading Comprehension, ESL

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Title

The Effects of Metacognitive Strategies on Reading Comprehension of ESL Students

Abstract

In Pakistan, English holds prestige as an official language. Being the language of instruction, reading comprehension of the English language is crucial in the development of critical thinking and equips learners to understand complex content. In this regard, metacognition can help the learner by understanding their thinking and improving their learning processes. Many studies show that by applying metacognitive strategies, students can develop their critical reading skills to comprehend advanced reading material. However, without correct application and understanding of the process, teachers and students remain in want of achieving results. This article explores the development of reading comprehension of ESL students by implementing meta-cognitive strategies in the students of the M.A. English programme. The aim is to explore the relation between metacognitive strategies (planning, monitoring and evaluating) and reading comprehension, and how metacognitive awareness has a direct impact on reading comprehension of ESL students.

Keywords: Language, Metacognition, Metacognitive strategies, Reading comprehension, ESL

Introduction

The English language has become the primary medium of knowledge and communications for media, politics, business, science, research and development, education, etc. Rohmah (2005) emphasises the learning of English as a global language by mentioning its social, political, economic and

communicational applications (p. 108). So, in order to meet the criteria for jobs, communication or functioning through the medium of English, it is imperative that an individual must have acceptable command over all the skills of the English language. In Pakistan, English language is the administrative language and is also used as the medium of



instruction. Similarly, international companies prefer to recruit employees having sound knowledge of reading texts as they need to be proficient in reading and comprehending agreements, contracts, bonds, deals, and communication of official messages through emails with seniors, managers, co-workers, and in their daily business (Channa, Nordin & Abassi, 2018, p. 132).

The skills which are needed for the English language are reading, writing, listening and speaking. Among these, the most emphasised skills at graduate and post-graduate levels are reading and writing. Reading is of immense importance at this level because many of the assessments depend on students' proficiency in reading skills. English as a second language (ESL) specialists are working hard to propose such programmes to develop the cognitive ability of ESL learners in reading comprehension skills, in which learners develop self-regulatory cognitive skills to monitor their reading comprehension. As Mijuskovic & Simovic (2015) state, "the way in which students become able to 'make sense of a reading text' is a process that should be developed and assessed within the foreign language classroom" (p.146).

The problem with reading comprehension is in using the typical approach to teach reading comprehension. As indicated by Randi, Grigorenko & Stenberg (2005) indicates that reading comprehension is commonly assessed by asking 'comprehension questions' but that practice only focuses the general understanding (p.20). The studies on reading comprehension have highlighted two major purposes for reading; one is to read a text just to comprehend and another is to read a text to complete some kind of task based on that reading. The majority of university students in Pakistan fall into the second category, as they read not to comprehend but to complete the tasks without analytical reading and without making use of their prior knowledge, ignoring contextual clues. Karim & Qanwal (2016) observe that most students especially in Asian countries at the university level are not competent enough in reading skills which causes them to be less efficient learners (p. 1). Teachers' perception of university students is also the reason for this bad reading habit development. They assume that university students are adults with plenty of background knowledge and training in reading skills, whereas, reading is the field in which university students need serious training to develop critical reading habits. In this regard Iwai (2011) describes the importance of developing reading comprehension skills as "learning what

strategies are, how to use them, when and where to use particular strategies, and the importance of evaluating their use is, therefore, key to the development of reading comprehension for students whose first language is not English" (p.156).

Regarding the issue, Grabe & Stoller (2002) state that the comprehension procedure is relatively intricate and demands efforts to form the meaning, and to understand the script. To overcome the problems encountered in reading comprehension, Flavell (1971,1976,1979,1987) marked a cognitive and metacognitive path to be used by many follower researchers to investigate the effects of metacognitive strategies to improve many skills including reading comprehension. Zhang (2008) states that as much one increases the knowledge and practice of metacognition, reading comprehension will evolve. Similarly, Zhussupova & Kazbekova (2016) state, "metacognition, or thinking about one's thinking, is the foundation for other reading comprehension strategies" (p.594). In 1979, Flavell introduced three phases of metacognition functioning: knowledge functioning (the awareness of what the metacognitive strategies are), procedural functioning (refers to the knowledge about how and when to apply those strategies), and executive functioning (implementation of metacognitive strategies automatically).

As it is suggested by Fitriisa, Tan, & Yusuf (2015), "to assist our understanding of students' reading problems, it is important to investigate their metacognitive awareness of reading strategies" (p.16). Similarly, Israel (2007) claims that metacognitive strategies help to develop the 'reader's meaning construction' as well as monitor the text and text evaluation, so as to understand the text.

Many researchers from all over the world investigated the implications of the metacognitive model introduced by Flavell (1971) to improve reading skills from primary-grade students to postgraduate students. However, in Pakistan, only a few attempts have been made to study the effects of metacognition on reading comprehension development.

Application of Metacognitive Reading Strategies

According to the comprehensive metacognitive reading framework proposed by Pressley & Afflerbach (1995), metacognitive strategies can be distributed into 3 types: planning, monitoring and evaluation. A language teacher is supposed to incorporate these strategies by implementing

them at different stages (before, during and after reading) of the reading process. On the foundation of this framework, Israel (2007) developed a model by associating metacognitive strategies with levels of reading procedure. Israel's comprehensive model not only provides the reading strategies and subcategories of those strategies but also provides the way to implement them through systematic instructions as well as the guidelines for metacognitive assessment. A short description of the metacognitive reading strategies framework adopted from Israel (2007), along with their sub-categories are as follows:

Planning (before reading)

Activating prior knowledge. Relating text to the reader's own prior life experiences and knowledge.

Overviewing information in the text. Overviewing the text to make sense of the topic, format and key concepts.

Relating text to text. Comparing ideas within the text for consistency and activating prior knowledge of the texts.

Relating text to self. Using information in the text to activate prior experiences

Monitoring (while reading)

Determining word meaning. Identifying terms or concepts that might be confusing.

Questioning. Asking questions while reading and questioning the information presented.

Looking for important information. Finding important information in the text that will aid in an increased level of understanding, activation of prior knowledge and increased concentration based upon perceived levels of importance to reading goals. Summarizing. Stating key concepts or events from the text.

Evaluating (after reading)

Thinking like the author. Beginning to understand the author's perspective.

Evaluating the text. Thinking about how this text made me feel.

Anticipating the use of knowledge. Understanding how to use knowledge in the future.

Significance of Application of Metacognitive Reading Strategies

Metacognitive reading strategies are valuable to the population where English reading comprehension is a handicap for students, professionals, businessmen, etc. In Pakistan, where the English language is taught as a compulsory subject from playgroup, the subject assumes greater significance. Moreover, in universities or in advanced studies, English reading comprehension becomes a tool to critically understand complex content-based text. Hence, post-graduate ESL learners are the prime beneficiaries of the subject.

The secondary beneficiaries include English reading educators who need to understand the instruction based on metacognitive strategies and activities to develop metacognitively trained readers. The content area specialists require the skill to develop learners' knowledge to build cognitive ability in reading comprehension skills to understand interpretative texts of domains other than English. It is also of advantage to curriculum designers for the development of courses by integrating metacognitive strategic instructions with content-based courses to aid learners in comprehending the text by using metacognitive strategies.

Understanding the Subject: Reading Comprehension

Reading comprehension is the procedure that requires the reader to extract and construct the meaning synchronously while interacting with the written text with whole involvement (Rand & Snow, 2002, p. 11). The struggle to improve reading comprehension goes back to the 1940s, when Francis Pleasant Robinson presented the technique 'SQ3Rs', "this technique is intended to improve comprehension of new material or difficult text and is designed for textbook reading and assignments" (Martinez, 2007, P. 31). Barbe (1958) while discussing problems, has identified two reasons for the problems in 'measuring reading comprehension': "(1) to determine whether a student understands what is read, and (2) to know what to teach so that the comprehension may be improved" (p. 343). While criticising the tests and the marking criteria, Barbe (1958) demands a better way to train teachers so that the results should lead teachers to select and implement the teaching

content to improve the reading comprehension of the students.

With regards to the purpose of reading, Anderson (1960) has stressed the learners' awareness of the purpose and has argued that the selection of skills in a reading text depends upon the purpose of reading, which must be stated clearly as 'directions and comprehension checks' at the beginning of the reading. To add to the development in the field, Simons (1971) has proposed a new approach which is based on linguistic and psycholinguistic theory. According to Simon (1971) in linguistic and psycholinguistic theory, "reading comprehension involves understanding sentences, and understanding sentences involves using the information about the structural relations of sentences as described by transformational grammar" (p. 356).

To contribute to the field of reading comprehension, the RAND Reading Study group and Snow (2002) have proposed a model in which reading comprehension comprises of three elements; the reader, the text and the activity. Rand and Snow (2002) have concluded the development of reading comprehension as: "The process of comprehension also has a macro developmental aspect. It changes over time, as the reader matures and develops cognitively, as the reader gains increasing experiences with more challenging texts, and as the reader benefits from instruction" (RAND & Snow, 2002, p.13).

Mckeown, Beck & Blake (2009) marked the distinction between content and strategy instruction by stating, "strategy instruction encourages students to think about mental process and, on that basis, to execute specific strategies with which to interact with the text" (p. 219). As the development continues towards teaching reading comprehension through strategic instructions, Hellekjaer (2009) contributes by stating "Reading is a crucial means of gaining new knowledge, students need to acquire effective strategies to cope with the reading demands" (as cited in Attaprechakul, 2013)

Sitthiprom, P. (2012) considers metacognitive strategies as a 'self-based method' through which students can improve their interactive proficiency as well as formulate constructive approaches towards reading comprehension. Similarly, Attaprechakul (2013) supports strategic training to improve 'text-based' interpretations to comprehend the meaning of unacquainted words and deal with syntactical issues within a sentence.

On the basis of the different reading comprehension perspectives discussed above, it can be concluded that reading comprehension has a significant role in one's life through which one can gain knowledge and understanding through the application of critical thinking.

Metacognition

It is not easy to define it as the jargon originated by educational psychologists, whereas the notion is intrinsic to human beings' thinking practices (Livingstone, 2003). Flavell (1979) defined metacognition as "knowledge and cognition about cognitive phenomena" (p. 906). Baker and Brown (1984) defined it as "an awareness of what skills, strategies, and resources are needed to perform a task effectively; and the ability to use self-regulatory mechanism to ensure successful completion of the task" (p. 354). Erwin (1985) defined it as:

"Metacognition refers to a set of higher-order mental behaviours in which one thinks about his or her thinking. This allows evaluation of current practices, allocation of mental resources, and adjustments of learning strategies so as to maximize comprehension and learning" (p.19).

Metacognition is commonly known as the process of "thinking about thinking" (Flavell, 1979). Griffith & Ruan (2005) have further explained Flavell's definition by constructing their own as "awareness and judgment about an event gained through experience" (p. 4). Israel (2007) defined it as a cognitive process where one is aware of his or her own thinking" (p. 1).

4.2.1. Metacognition Foundation. John H. Flavell, an American Developmental Psychologist from Stanford University, is considered the founder of 'metacognition' theory. He was inspired by the theory of 'The Cognitive Development' by Jean Piaget (1896-1980). Flavell (1976) has presented a systematic definition of 'Metacognition' as:

"In any kind of cognitive transaction with the human or non-human environment, a variety of information processing activities may go on. Metacognition refers to the active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in service of some concrete goal or objectives" (Flavell, 1976, p. 232).

In 1979, Flavell presented an official model of metacognitive Theory that encompasses a variety of operations including learning and acquisition of all four skills

of language while linking self-directive to social collaboration as an educational process of personality development. This model includes four components:

Metacognitive knowledge - “one’s knowledge or beliefs about the factors that affect cognitive activities” (p. 906).

Metacognitive experiences - “any conscious cognitive or affective experiences that accompany and pertain to any intellectual enterprise” (p. 906).

Tasks and goals - “metacognitive goals and tasks are the desired outcomes or objectives of a cognitive venture” (p. 907).

Strategies or activities - used to evaluate the learner’s learning process (p. 907).

Through metacognitive strategies, learners become conscious of their cognitive development in reading comprehension and evaluate whether they have achieved their learning goals or not. (Flewell, 1979). In 1987, Flavell elaborated on the model he presented in 1979 and highlighted the difference between cognitive and metacognitive strategies. He also explained the metacognitive experience as a powerful intuition to be expressed explicitly. For example, if the reader feels that he is successful or failed to achieve the desired or expected outcome, is the realization of metacognitive experience.

4.2.2. Metacognition - Reading Comprehension. The connection between metacognition and reading was first established in 1978 by Myers and Paris. The evolution of metacognition theory from cognitive psychology to educational psychology and then its integration into other skills, like reading, took place progressively with the successive metacognitive research studies done in the respective fields (Israel, 2007).

Baker and Brown (1984) presented a significant work on integrating metacognitive theory and reading skills, based on Flavell’s theory of metacognition. Baker and Brown have stated that metacognition consists of two dimensions: Knowledge of cognition and regulation of cognition. Regulation of cognition is unstable because it varies according to learners’ age group. Baker and Brown (1984) have explained that regulation of cognition includes “checking the outcome of strategy, planning one’s next move, monitoring the effectiveness of any attempted action and testing, revising and evaluating one’s strategies for learning” (p. 354).

Another significant study done by Pressley and Afflerbach (1995) as cited in Israel (2007), applied a ‘metacognitive assessment tool’ to find out the behaviours of good readers. They stated the findings as, “the expert readers and highly skilled readers use specific metacognitive strategies before, during and after reading. They apply these strategies automatically” (p.3). The notion of ‘automaticity’ in utilising metacognitive strategies in reading comprehension has been appreciated and supported by many researchers. In addition, they encourage to application of metacognitive strategic instructions to teach reading comprehension (Israel, 2007).

Pressley and Afflerbach (1995) offered a metacognitive reading strategy framework which comprises three types of reading strategies: planning, monitoring, and evaluation strategies to be applied before, during and after the reading. Israel (2007) has highlighted the importance of the model presented by Pressley and Afflerbach (1995) as, “teaching children to reflect on the processes and strategies they use before, during and after reading will also help developing or less proficient readers understand the mental processes used when making sense of the text” (p. 9).

A similar metacognitive framework was applied by Michalsky, Mevarech and Haibi (2009) to achieve reading comprehension proficiency in scientific text. This framework was adopted from Mevarech and Kramarski (1997) and comprised the planning strategies beMETA to be applied before reading the scientific text, monitoring strategies as duMETA to be implemented during reading the scientific text and afMETA strategies are used to evaluate after reading the scientific text.

To summarise, it can be assumed that metacognitive reading strategies can make a learner a skilled reader, who can develop the ability to construct the correct meaning, monitor his comprehension and evaluate the reading text by utilising metacognitive strategies automatically.

Analytical Review of Research Studies

Metacognition started to become the focus of attention of many researchers in the 1970s, and a revolution started to take place in the field of educational psychology. Reading comprehension has been the major focus of attention for these researchers, as it is the basic skill that helps learners achieve their academic goals. The importance of reading skills is described by Mahdi (2016) as “reading is a basic language

ability and a very complicated act that everyone should master” (p. 1).

To develop students' academic reading proficiency, Zhang (2008) undertook a study with the aim of investigating ESL learners' reading comprehension development during reading instructional sessions over a period of two months through the application of strategies. IELTS (International English Language Testing System) reading comprehension tests were used to measure the difference in pre-test and post-test progress. The findings revealed that strategies-based instructional intervention can positively affect the progress of reading comprehension performance.

With reference to ESL learners, Aghaie & Zhang (2012) performed another advanced study to assess the 'effects of explicit instruction in cognitive and metacognitive reading strategies on Iranian EFL students' reading performance and strategy transfer' (Aghaie & Zhang, 2012). During the four months of strategy-based instructional training session, both of the groups received the same content material from the same instructor but the control group did not receive metacognitive instructional training. The findings established that the treatment group showed considerably improved results than the control group. The findings of the study suggest that strategy-based instruction for reading comprehension can develop autonomous behaviour in students as well as the ability to transfer the strategy according to the situation. Aghaie and Zhang (2012) have recommended that metacognitive reading strategies should be part of the instructions and should be incorporated into different courses to develop learners 'proficiency in language skills.

Jafari (2012) in his study has aimed to measure the development in reading comprehension as a result of instructions through the use of metacognitive strategies. Jafari (2012) used the reading comprehension section of TOEFL (2007) in order to homogenise the participants' reading proficiency. On the basis of the positive outcomes of implementing metacognitive strategies in instructional sessions and improvement in reading comprehension, it was recommended by Jafari (2012) to, “plan for metacognitive instruction with a view to raise effectiveness in the language classes” (p.11).

With similar intentions to find 'the impact of metacognitive strategies on reading comprehension among ESL learners' Habibian (2015) carried out a quasi-experimental research

design-based study. The study found that metacognitive strategic instruction not only affects students' thinking processes but also develops them as conscious decision-makers in the learning process. The findings also revealed that the students who became familiar with metacognitive strategies had positive perceptions about the effectiveness of explicit instructions of metacognitive strategies in reading comprehension, so it was proposed by the researcher that students, as well as teachers, should be aware of metacognitive strategies and their impact on the academic development. The researcher recommended that while implementing metacognitive strategies, teachers must know the extent they need to instruct, monitor and train the students to obtain the level of automaticity of metacognition in their reading comprehension skills.

Many researchers have also tried to assess the effectiveness of metacognitive strategies in improving the reading of subjects other than English. For example, Michalsky, Mevarech & Haibi (2009) have highlighted the effects of metacognitive strategies on the improvement of elementary school children's reading comprehension of scientific texts. The teachers selected to participate in the study received a separate set of instructions each in training the students in employing metacognitive strategies at different stages of reading scientific texts. Based on the results, the researchers concluded two major findings that students who get metacognitive strategic instruction can outperform others who get none of this kind of training. Secondly, the students who received instructions on the use of metacognitive strategies after reading the text got the opportunity to go back and regulate their comprehension.

With regard to the use of metacognitive strategic instructions to improve reading comprehension of engineering students, a pilot study was conducted by Channa, & Nordin (2016) in Pakistan. The questionnaire was adopted from Fauzan (2003) and it contained four parts: demographic, reading comprehension, metacognition and scaffolding. The study discovered the scaffolding strategy to be the most significant in improving reading comprehension.

In order to take another step towards the development of instructions based on metacognitive reading strategies, Channa et al. (2017) have investigated reading comprehension problems to determine the appropriate strategies for improving the reading comprehension skill of 1st-year students in the engineering department. The findings

proved that teachers should teach students to apply metacognitive strategies while reading to obtain a significant achievement in their engineering programme. The results highlighted some of the reading strategies as important to be practised for improving the reading comprehension of engineering students. These strategies are scanning the text, making guesses by using contextual clues, understanding through previous knowledge and using dictionaries to understand new terms. The researchers suggested that teachers should employ metacognitive reading strategies in developing their daily lesson plans and in actual classroom practice to improve the reading comprehension of engineering students.

In addition to the research discussed above, Channa, Nordin & Abbasi (2018) have contributed more to the field of 'metacognitive scaffolding in reading comprehension' by taking samples from the same target population of engineering students. Channa, Nordin & Abbasi focused here to confirm the development of a read-aloud strategy as a result of metacognitive reading strategy - scaffolding. The results stated that despite the fact that participants were attentive and well aware of their cognitive strengths and weaknesses to monitor their reading comprehension, they were unable to recall and relate their background knowledge to the present reading text. As a result, they could not make guesses while reading the text, so they failed to complete the task in the given time. However, the findings confirmed that metacognitive strategies are the means to improve the reading comprehension of not only engineering students but also language students.

Karim and Qanwal (2016) aimed to discover 'the correlation between cognitive reading strategy instruction and metacognitive reading strategy awareness' among ESL students of B.An Honours programme in Pakistan. The results showed that the ESL learners who received a significant level of cognitive reading strategic instructions from their teachers showed their awareness of almost all key strategies of reading comprehension. Moreover, the students had a strong knowledge of metacognitive strategies and they frequently used these strategies to complete their reading comprehension task successfully. The findings about the correlation between cognitive and metacognition revealed that teacher's pre-reading instruction and students' planning strategies have no positive correlation, while pre-reading instructions can be correlated with students' monitoring and

evaluation strategies. The study could not conclude the correlation between teacher's reading instructions and students' awareness of metacognitive strategies.

Based on the review of previous studies, three common objectives have emerged as significant:

- (1) The student's awareness of metacognitive reading strategies.
- (2) The impact of metacognitive strategic instructions on reading comprehension skill.
- (3) The improvement of English reading comprehension of the ESL students of the English domain or any other subject.

The participants targeted in the previous research studies varied in age, level of background knowledge and the region they belonged to. This shows that metacognitive strategies are required by the students at any age, level and region. The major findings of the previous studies showed the achievement of a similar goal to develop an awareness of metacognitive strategies in ESL learners through systematic instructions to improve their reading comprehension of English texts as well as subject-specific texts. This awareness plays a significant role in making the reading comprehension process successful.

Application of Metacognitive Strategies for Reading Comprehension of ESL Students

In order to ascertain the effects of metacognitive strategies on the reading comprehension of ESL students, research has been carried out at NUML, Quetta Campus. The research has studied the development of reading comprehension of ESL students by implementing metacognitive strategies in the students of the M.A. English programme. The study followed an experimental research design based on the quantitative analysis of data. The sample comprised of 22 students from the 3rd semester. The participants were assigned either a control or experimental group randomly with 11 students in each group. In order to triangulate the data, the researcher used two instruments to collect the data: (1) pre-test and post-test and (2) Metacognitive Strategies for Reading Comprehension Questionnaire. Both the groups-control and experimental- received different treatment during the experimental session. The experimental group was taught reading comprehension through metacognitive strategies, whereas the control group received no such treatment and

carried out reading comprehension in the traditional manner. The experimental sessions consisted of 15 classes of 45 minutes each. The data was analysed through a number of statistical tests of IBM SPSS Statistics version 24.

Conclusions of the Study

The research analysed the use of metacognitive strategies at different stages of reading comprehension of ESL students at the postgraduate level. The key findings of the study have shown that metacognitive strategies have a significant impact on improving the reading comprehension of ESL postgraduate learners before, during and after reading stages. The findings are in line with Griffith & Ruan (2005), who in their study concluded that “metacognitive studies have provided literacy educators with a greater understanding of reading comprehension processes and compensatory strategies that successful readers employ to support text understanding” (p. 10). The key conclusions based on the findings of the study are discussed in succeeding paragraphs.

6.1.1. The study focuses mainly on training students to be aware of their cognitive process by using metacognitive reading strategies before, during and after the reading tasks. Through metacognitive strategies awareness, students become motivated as well as active in the reading task as they need to monitor their reading process so that they can use metacognitive strategies wherever they feel a breakdown of comprehension.

6.1.2. As the outcome of learning metacognitive strategies, students can develop analytical skills, which is the basic requirement of comprehending a reading text at the graduate or post-graduate level.

6.1.3. Through metacognitive strategies, students learn to deal with vocabulary issues, which is considered the main reason for the breakdown of comprehension in reading as ESL learners. Metacognitive strategies develop a self-monitoring attitude in learners towards identifying and learning new words through multiple metacognitive strategies as understanding the meaning of a new word by distributing it into parts or guessing its meaning through contextual clues.

6.1.4. The findings show the important role of instructional training of metacognitive reading strategies for putting them into practice. Teachers should be trained to be aware of metacognitive strategies as well as the ways to implement them during reading sessions in ESL classrooms.

This requires a very committed and consistent attitude from teachers to carry on the strategic instructions until it becomes an autonomous behaviour. Teachers need to be more active in the strategic instructional session, to be aware of how much assistance is required and at what stage it is required. Moreover, if learners face any collapse or miss out on using any strategy, it is the teacher’s responsibility to assist them indirectly to become conscious of their inaccuracy and become self-directed.

6.1.5. Metacognitive instructive sessions help to bridge the conventional gap between teacher and student, as both are actively involved in the cognitive process to develop skilful cognitive behaviour, far away from the restraint to assess or to be assessed.

6.1.6. Metacognitive awareness develops a positive and motivational attitude in learners as they learn to apply metacognitive strategies in reading skills. Later when they get trained in using metacognitive strategies they become automatic, and ultimately they develop a positive behaviour towards monitoring their cognition, not only in reading but in any task that involves comprehension.

6.1.7. Metacognitive strategies are not restricted to be used only by ESL learners, they are applicable in all domains. In Pakistan, most of the subjects are in the English language, students need to develop effective and critical reading skills to comprehend their domain-specific texts. Many research studies done on the effectiveness of metacognitive strategies focus on other domains such as engineering, maths, law etc.

6.1.8. The review of previous literature also reveals that metacognitive strategies are effective in multiple ways regardless of age, gender, educational level and attainment level of the students living in any part of the world.

6.1.9. Metacognitive strategies make students conscious and well aware of their subject’s contents, as metacognitive strategies activate their prior knowledge to be connected with the content presented in the reading text.

6.1.10. Metacognitive strategies develop the self-assessment skills as well as the reflective skills of the students by enabling them to evaluate the text and the author’s point of view. It makes students more expressive in reflecting upon the text. In order to express their evaluation, they revisit and organize their ideas to express their observations in the form of a summary.

Recommendations

On the basis of the literature, analytical analysis of studies and conclusions of the study, recommendations are being preferred in succeeding paragraphs to integrate metacognitive strategies with the teaching-learning process in ESL classrooms.

6.2.1. Educational policymakers and course designers

6.2.1.1. educational policymakers should make decisions at the state and province level to improve the reading comprehension skills of students as ESL learners by implementing metacognitive strategies in their actual classroom.

6.2.1.2. The educational strategy is to provide the resources and guidelines to the educational institutes to help them in teachers' training on metacognitive strategic instructions.

6.2.1.3. The course designer should develop the curriculum and courses while incorporating metacognitive strategies with reading skills.

6.2.2. Educational institutions

6.2.2.1. As metacognitive strategies' implementation is highly dependent on strategies' instructions, teachers' training sessions and workshops ought to be arranged by the administration of educational institutions. The educational institutes should invite ESL experts and educational trainers as guest speakers from the countries which have already incorporated metacognitive strategies with reading skills, in their curriculum as well as in classroom practice.

6.2.2.2. Metacognitive strategies' instructions should be improved by motivating teachers to share their observations and feedback on teaching metacognitive reading strategies with others through discussion and seminars.

6.2.3. ESL teachers and subject specialists

6.2.3.1. Teachers should be well aware and well equipped to conduct metacognitive strategies' instructions successfully.

6.2.3.2. Teachers should act more like facilitators, in order to make ESL learners self-directed.

6.2.3.3. Instead of guiding students directly, teachers should assist students indirectly through prompts.

6.2.4. ESL students as primary beneficiaries Students ought to practice metacognitive strategies through reading comprehension tasks until they develop self-directed behaviour which will make them autonomous in using these strategies.

Conclusion

Considering the current state of literacy with respect to reading skills in English, it was a requirement to propose ways to assist post-graduate students in improving their reading skills in English so that they are able to meet the pace of educational developments particularly for students with limited exposure to English language. In any of the academic domains, English reading skills are considered as a pre-requisite for studying the content courses, yet there are limited studies in Pakistan, which aim to suggest strategies for improving the reading comprehension skills of students at various levels. Through literature review, analytical analysis of studies and the conclusions of the study, some recommendations have been proffered for implementation of metacognitive strategies along with the instructional techniques in the classrooms to improve reading comprehension of ESL students in Pakistan in general and for Balochistan in particular. Previous studies have shown the successful implementation of metacognitive strategies in other academic fields as well, resulting in the accomplishment of reading comprehension skills in domain-specific texts.

References

- Aghaie, R., & Zhang, L. J. (2012). Effects of explicit instructions in Cognitive and Metacognitive reading strategies on Iranian EFL students' reading performance and strategy transfer. *Instructional Science*. Springer. 40(6), 1063-1081. <http://www.jstor.org/stable/>.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Anderson, A. W. (1960). Directing reading comprehension. *The Reading Teacher*. International Literacy Association. 13(3). <http://www.jstor.org/stable/>.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Attaprechakul, D. (2013). Inference strategies to improve reading comprehension of challenging texts. *English Language Teaching*. Canadian Center of Science and Education. 6(3). (82-91). <http://dx.doi.org/>
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Baker, L., & Brown, A.L. (1984). *Metacognitive skills and reading*. *Handbook of Reading Research* (345-394). New York: Longman.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Baker, L. (2005). Developmental Differences in Metacognition: Implications for Metacognitively Oriented Reading Instruction. In S.E. Israel, C.C. Block, K.L. Bauserman, & K. Kinnucan-Welsch (Eds). *Metacognition in Literacy Learning: Theory, assessment, instruction, and professional development*. (61-79). Hillsdale, NJ: Erlbaum.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Barbe, W. B. (1958). Measuring reading comprehension. *The Clearing House*. Taylor & Francis. 32(6). <http://www.jstor.org/stable/>
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Channa, M. A. & Nordin, Z. S. (2016). Measuring the reliability of Metacognitive strategies in reading comprehension questionnaire: A pilot study on first-year Engineering students in Pakistan. *Journal of Cognitive Science and Human Department*. 1(2). <http://www.researchgate.net/publication/>.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Channa, M. A., Nordin, Z. S. & Simming I. A. (2017). Lenses on Metacognition: Teachers' perceptions toward strategies in reading in a Pakistani context. *Psychology in Russia: State of the Art*. 10(1). (34-48). <http://psychologyinrussia.com>.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Channa, M. A., Nordin, Z. S. & Abbasi, A. M. (2018). Metacognitive scaffolding in reading comprehension: Reveal strategies to overcome reading obstacles of Engineering at QUEST, Nawabshah, Sindh, Pakistan. *International Journal of English Linguistics*, 83(131-138). Canadian Centre of Science and Education. <http://doi.org/10.5539/ijel>.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Erwin, R. W. (1985). Research currents for developmental reading educators: Metacognition. *Research and Teaching in Developmental Education*. New York College Learning Skill Association. 2(1). (19-23). <http://www.jstor.org/stable/>.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Fitrisia, D., Tan, K. E., & Yusuf, Y. Q. (2015). Investigating metacognitive awareness of reading strategies to strengthen students' performance in reading comprehension. *Asia Pacific Journal of Educators and Education*. 30,15-30. [http://doi.org/10.35484/psr.2022\(6-ID08](http://doi.org/10.35484/psr.2022(6-ID08)
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Flavell, J. H. (1987). Speculation about the nature and development of metacognition. In F. Weinert & R. Kluwe (Eds). *Metacognition, Motivation, and Understanding*. (21-29). Hillsdale, NJ: Erlbaum.
- Flavell, J. H. (1971). First discussant's comments: What is memory development? *Human Development*. 14, 272-278. <https://doi.org/10.1159/000271221>
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Flavell, J. H. (1976). Metacognitive aspects of problem-solving. In L. B. Resnick (Ed.), *The Nature of Intelligence* (231-236). Hillsdale, NJ: Erlbaum.
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive development inquiry. *American Psychologist*. 34. (906-911). <https://doi.org/10.1037/0003-066X.34.10.906>

[Google Scholar](#) [Worldcat](#) [Fulltext](#)
Grabe, W., & Stoller, F.L. (2002). *Teaching and Researching Reading*. Harlow: Pearson Education.

[Google Scholar](#) [Worldcat](#) [Fulltext](#)
Griffith, P. L. & Ruan, J. (2005). What is Metacognition and what should be its role in Literacy Instruction? In S.E. Israel, C.C. Block, K.L. Bauserman, & K. Kinnucan-Welsch(Eds). *Metacognition in Literacy Learning: Theory, assessment, instruction, and professional development*. (3-18). Hillsdale, NJ: Erlbaum.

[Google Scholar](#) [Worldcat](#) [Fulltext](#)
Habibian, M. (2015). The impact of training Metacognitive strategies on reading comprehension among ESL learners. *Journal of Education and Practice* 6(28). (61-69). www.iiste.org.

[Google Scholar](#) [Worldcat](#) [Fulltext](#)

Martinez, S, A. (2007). *Survey research of reading methods used by New Mexico middle school teachers*. Kansas State University, Manhattan, Kansas.

[Google Scholar](#) [Worldcat](#) [Fulltext](#)

Mckeown, M. G., Beck, I. L. & Blake R. G. K. (2009). Rethinking reading comprehension instruction: A comparison of instruction for strategies and content approach. *Reading Research Quarterly. International Reading Association*. 44(3). (218-253). <http://mhs.dcsdschools.org/>.

[Google Scholar](#) [Worldcat](#) [Fulltext](#)

Michalsky, T., Mevarech, Z. R. & Haibi, L. (2009). Elementary school children reading texts: Effects of Metacognitive instruction. *The Journal of Educational Research. Taylor & Francis*. 4(5) (363-374). <http://www.jstor.org/stable/>.

[Google Scholar](#) [Worldcat](#) [Fulltext](#)