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ROLE OF METACOGNITIVE READING STRATEGIES IN ENHANCING THE READING COMPREHENSION OF STUDENTS AT TERTIARY LEVEL IN ESL CONTEXT

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ABSTRACT

The systemic review of this research demonstrates that metacognitive reading strategies can enhance learning outcomes for ESL students. The systematic review identifies three types of metacognitive reading strategies: planning (previewing and setting goals), monitoring (self-checking and problem-solving) and evaluating (reflecting on and summarizing what was read). Although globally, ESL students have some moderate level of understanding and application of these strategies, it appears that the most commonly utilized strategies by these students are monitoring (self-checking) and problem-solving; these strategies have a variable correlation to reading comprehension achievement (average score). Of the Indian studies examined, there were gender differences and discipline-specific gaps of use of metacognitive reading strategies, particularly for undergraduate Commerce (B.Com) students, indicating the need for explicit instruction of reading strategies. Monitoring was found to be the most significant predictor, followed by Planning and Evaluation as support strategies. Based on the findings of this systemic review, there is an urgent need to develop a metacognitive reading strategy curriculum and conduct more longitudinal, localized research in India to help the Indian ESL population become more independent readers.

KEYWORDS: Metacognitive reading strategies, ESL reading comprehension, Tertiary ESL learners, Planning strategies, Monitoring strategies, Evaluative strategies, Indian higher education

1. INTRODUCTION

Comprehension through reading is one of the essential components of academic success at the post-secondary level and will require learners in college or university programs to read and process a significant amount of English language text (Meniado 2016). This becomes even more relevant in an academic context, such as within an Indian engineering program, which provides instruction through English as the primary language of instruction. The need for developing strong reading skills is one of the primary objectives of this type of educational program (Keerthy 2025). Although, many ESL learners experience difficulties with comprehending the meaning of an academic text and continue to struggle after spending several years of studying the English language and researching. As reported by researchers, a substantial number of EFL and ESL learners are also facing "significant challenges" in understanding academic texts (Ahmadi et al. 2013). As a result, poor comprehension through reading will continue to be a major barrier to educational advancement and highlights the need for providing effective educational support to second language learners. The teaching of meta-cognitive reading strategies has been shown in research studies to be a promising way to help students develop their reading comprehension skills. Meta-cognition refers to the process by which people become aware of how they think and learn, and this includes planning, monitoring, and evaluating their understanding of what they read. According to Ahmadi et al., "The awareness of metacognitive reading strategies is very important for successful reading comprehension". These researchers state that if students do not receive adequate training in using metacognitive reading strategies, they may struggle with reading comprehension, whereas explicitly instructing students in metacognitive reading strategies should improve their reading comprehension. Stated differently, students will become more aware of and practice using metacognitive strategies when they receive support in developing them, which should lead to greater self-direction and higher levels of comprehension while reading. The primary types of meta cognitive strategies used by most readers are: 1) ways to prepare for reading (planning) and activate what you already know; 2) Ways to check comprehension (monitoring); and 3) ways to determine your understanding of a text (evaluating). A study of university ESL learners showed that students adjusted their reading speeds, used prior knowledge when necessary and inferred the meanings of new words. When they had trouble

comprehending something, they would reread certain passages, look at the context to see if they could help themselves until they fully understand the passage (Iwai 2009). These strategies change the reader's experience from one of being a passive reader or learner to one of being an intelligent, independent learner who has created goals for themselves and/or their studies, confirmed that they knew what they were reading or learning, and can modify and adapt their methods/speed based on the material being studied (Madhumathi and Ghosh 2012). The beneficial role of the application of meta-cognitive strategies on comprehending is recorded in many studies. A recent systematic review of EFL settings was able to find that the use of meta-cognitive strategies in reading instruction is capable of enhancing the reading comprehension of students and enhancing their reading behaviours (Yulita and Merlin 2023). In the context of Saudi Arabia, Meniado (2016) also notes that meta-cognitive strategies are also a contributing factor to reading comprehension. In an Indian context, Madhumathi and Ghosh (2012) discovered that students who had applied more reading strategies were likely to score higher in comprehension and using strategies was moderate in terms of performance. These results amplify the overall opinion on L2 literacy research that improved readers are those who proactively manage their cognitions by using strategies (Anderson 1991; Mokhtari and Sheorey 2002; Pressley 2002). Put differently, meta-cognitive reading abilities are not only advantageous, but they frequently mean the difference between success and failure: by being able to keep an eye on what they are gaining, and to adapt the methods, haphazardly, the reader is in a better position to interpret difficult academic texts. However, even with this fact, little attention has been given to the exact role of meta-cognitive reading strategies amongst tertiary level ESL students in India. The linguistic and educative context of India, in which a significant amount of students are taught in English as a secondary or foreign language, indicates that the education and culture can be a factor in strategy application. The existing research may suggest that the strategy teaching may be particularly in demand: Indian engineering students, in particular, regard reading as a key aspect of their English course (Keerthy 2025), yet there are no specific interventions. In comparison, international studies (e.g. within the context of Saudi and Asian universities) emphasize the importance of structured training of strategy in order to facilitate reading instructions. Therefore, it is of significance to investigate meta-cognitive strategy adoption within

the Indian tertiary environment. The pedagogy can be informed by a better understanding of how such strategies work with Indian ESL learners: it can assist the educator to construct instruction that directly develops strategic reading habits and, thus, improve comprehension. Overall, the meta-cognitive reading strategies have been generally identified in the literature as important mechanisms that help to enhance meaning. It has been found that when readers plan, monitor, and evaluate their reading, they can have a better understanding of the texts and that it is possible to have gains in comprehension when these strategies are taught. Based on these observations, the current study explores how meta-cognitive reading strategies can enhance the reading comprehension of ESL students at the tertiary level in India with the view to fill the gap that exists between the international research and instructional practice.

2. OBJECTIVE OF STUDY

1. To review existing empirical studies on the awareness and use of meta-cognitive reading strategies among tertiary-level ESL learners, with particular reference to undergraduate Commerce (B.Com) students in India.
2. To analyse findings from prior research on the relationship between meta-cognitive reading strategies and reading comprehension performance in tertiary-level ESL contexts.
3. To critically evaluate the effectiveness of planning, monitoring, and evaluative meta-cognitive reading strategies as reported in peer-reviewed studies on academic reading comprehension

3. RESEARCH METHODOLOGY

3.1 Research Design

The research design that will be used is a systematic analytical review design that relies on secondary data to investigate the role of meta-cognitive reading strategies in student reading comprehension at tertiary level learners with specific reference to learners studying undergraduate Commerce (B.Com) student in India. The design is suitable because it allows the synthesis and critical analysis of the existing empirical research in a structured form without primary data collection. The review adheres to the systematic review guidelines in education and applied linguistics in order to be transparent, rigorous, and reproducible.

3.2 Data Collection Method

The information is gathered through the use of secondary sources, which are peer-reviewed

scholarly articles. To identify the relevant study, the extensive search of the established scholarly databases, including Scopus, Web of Science, ERIC, JSTOR, and Google Scholar, is considered. The journal articles, doctoral theses and conference proceedings published in English are considered only. Blogs, magazines, or opinion articles are deemed as non-academic sources.

There is the application of clear inclusion and exclusion criteria. The studies are also considered to include studies that are concerned with meta-cognitive reading strategies, are interested in reading comprehension in ESL/EFL settings, and have empirical results or established theoretical knowledge. Research that addresses primary school, non-ESL situations, or other unrelated subjects in language is not included. Especially research done in India or other similar ESL settings is given more consideration to ensure contextual relevance.

3.3 Data Analytics Instruments and Methods

Thematic synthesis and qualitative content analysis were used to analyse the studies selected. The pertinent data were identically dissected such as the context of the research, characteristics of the participants, research design, data collection tools, metacognitive reading strategies types studied, and several findings were related to reading comprehension.

This analysis was done in three phases. To begin with, general patterns of trends in the available literature were mapped by means of the descriptive analysis, including the nature of metacognitive strategies, to be discussed, and the distribution of the studies across geographical locations. Second, thematic analysis was conducted in order to establish common patterns of the awareness, use, and effectiveness of planning, monitoring, and evaluative strategies among learners. Third, comparative analytical method was used to analyze similarity, differences and gaps in research findings in different studies with special focus on the Indian tertiary level ESL scenario. Conclusions have been made where applicable, as regards to pedagogical implications of teaching ESL to undergraduate students of Commerce (B.Com).

3.4 Ethical Considerations

Since the research is purely secondary research, it does not require human subjects and direct data gathering hence it will not need institutional ethical approval. However, there is an ethical standard that is strongly maintained in academic studies. Every source is duly recognized using proper referencing to prevent plagiarism and remain intellectually honest.

The paper is very transparent regarding the data selection and analysis process, and there is no data misrepresentation or out of context. The copyright laws and the rules of academic integrity are not violated in the course of the research.

4. FINDINGS & ANALYSIS

Objective 1 : To review existing empirical studies on the awareness and use of meta-cognitive reading strategies among tertiary-level ESL learners, with particular reference to undergraduate Commerce (B.Com) students in India.

Metacognitive reading strategies are the capability and awareness of learners about their reading processes in terms of being able to control their reading processes prior to, during reading and afterwards. It has its basis on the research of Flavell (1979) who described metacognition as conscious control and regulation of cognitive processes. When addressing reading, these strategies are usually organized into three phases: planning strategies that are used prior to reading, monitoring strategies that are used during reading and evaluative strategies that are used after reading. Successful readers are the ones who can participate in all three processes in order to control the interpretation and deal with the reading problems (Flavell, 1981; Anderson, 2003). In order to analyse the ways in which learners control their reading, various standardised measures have been created, including the Metacognitive Awareness of Reading Strategies Inventory (MARS), which divides the strategies into global, problem-solving, and support strategies (Seifoori, 2020).

Empirical research in different ESL and EFL settings has shown that the tertiary-level students utilize a variety of metacognitive reading strategies. Problem solving strategies which include rereading the hard parts, inferring contextually, and moderating reading speed are said to be the most common, whereas global planning strategies are used less frequently. Research in Malaysia and the Philippines has proven that undergraduate ESL students have a moderately high awareness of metacognitive strategies in reading and strongly favor mechanisms that can be used to solve short-term comprehension problems (Tengku Mohamad and Maarof, 2012; Daguy-James and Bulusan, 2020).

Such trends are agreeable with other contexts of the second language, where effective ESL-readers actively use their retrieved strategies of predicting content, summarising main concepts and keeping track of reading comprehension. Studies also indicate that learners who are more proficient in the language have a broader repertoire of strategies that they make

better use of and that female learners have a tendency of reporting higher awareness and use of strategies as compared to male learners.

In the context of the Indian higher education, some evidence available is, nevertheless, showing the same patterns, albeit not as extensive as that. In their research of the Indian undergraduate ESL students, Madhumathi and Ghosh (2012) noted that the latter depended more on the problem-solving strategies, whereas planning strategies, e.g. previewing texts and setting reading goals were not used as often. In addition, their results showed that there was a good interaction between the overall strategy use and reading comprehension, and a significant gender variance in strategy awareness.

Monika and Devi (2022) shed some more light on this matter as the authors investigated the application of metacognitive reading strategies by the Indian ESL learners and noticed that more frequently applied were the pragmatic strategies, including note-taking, rereading, whereas less frequently were applied analytical strategies, including goal-setting and post-reading evaluation. These results indicate that Indian ESL learners are more inclined to deal with immediate comprehension and do not plan and assess their reading systematically.

It has also been shown through research that explicit teaching in metacognitive reading strategies can be a great help in raising the awareness and application of the strategies by the learners. As an example, Khurram (2023) proved that the continued metacognition instruction enhanced the strategic awareness of students and their capacity to effectively use the reading strategies. Nevertheless, the majority of the studies available in India are based on cross-sectional surveys with the help of such tools as SORS or MARS and provide a picture of the learners whose strategies were used at one point in time (Madhumathi and Ghosh, 2012). A paucity of longitudinal studies and classroom-based interventions that investigate the process of development of strategy use during the academic study remains.

The biggest gap in the Indian literature is the lack of emphasis on discipline-specific ESL students, especially those in undergraduate Commerce (B.Com) students who need to read a significant amount of academic, technical, and professional writing in English. The majority of researches mix learners with varying academic backgrounds and as a result of this, they miss out on differences in disciplines of reading and strategy application. Therefore, on one hand, the current literature can

indicate that the problem-solving strategies are the primary strategy that Indian ESL learners use, on the other hand, there is no evidence about how the students of the Commerce consciously plan, monitor, and evaluate their reading process.

To conclude, existing studies have shown that ESL students at tertiary education level in India have moderate awareness and application of metacognitive reading skills, but they apply problem solving methods more. Nevertheless, it is evident that discipline-based and longitudinal studies addressing Commerce (B.Com) learners are required to gain a clearer view on how metacognitive reading methods can be used to facilitate their academic reading needs and general understanding in a higher educational setting..

Objective 2: To analyse findings from prior research on the relationship between meta-cognitive reading strategies and reading comprehension performance in tertiary-level ESL contexts.

Despite some inconsistency in the findings of studies, the research has confirmed consistently that metacognitive reading strategies use is positively connected with reading comprehension in tertiary level ESL learners. Majority of researchers distinguish three general types of metacognitive reading strategies: global strategies that aid an overall meaning-making; problem solving strategies that help a reader resolve comprehension challenges in reading; and problem sustaining strategies such as taking notes and rereading. These strategies and their association with the reading comprehension have traditionally been studied with the help of self-report scales, including MARSIS and SORS, as well as with the help of standardised reading comprehension tests (Tavakoli, 2014).

A number of studies done in India and in other global settings indicate that strategies involved in problem solving are the most commonly applied, and are more closely related with reading comprehension compared with other forms of strategies. As an example, Kaur and Bhambri (2014) found the results that Indian undergraduate ESL students used more problem-solving strategies than global strategies and that more intensive strategy use was linked to an improved understanding result. The same patterns are reflected in the research, which has been carried out in Iran, China, and Indonesia, with learners who are more aware of metacognitive strategies performing better in reading (Tavakoli, 2014; Li et al., 2023; Anggia and Anita, 2024).

The quality of this association is not however consistent across studies. Whereas there are studies that describe a distinct positive relationship between

strategy use and comprehension, there are studies that state that such a relationship is quite small or situational. Indicatively, Metacognitive strategy application and reading comprehension were moderately correlated in Indian ESL learners (Madhumathi and Ghosh, 2012), but no clear relationship was found in a Saudi EFL scenario (Meniado, 2016). These variations indicate that the effectiveness of metacognitive strategies can be affected by other factors, including the language proficiency of learners, instructional activities, complexity of the text, as well as the design of the research.

The different strategies have also been found to differ based on cross-cultural preferences. The Indian and Indonesian studies report that there is a higher dependency on problem-solving strategies and Iranian research indicates that they are more dependent on support strategies (Madhumathi and Ghosh, 2012; Tavakoli, 2014; Anggia and Anita, 2024). The implications of these findings are that educational and cultural backgrounds of learners can influence the application of metacognitive strategies in the course of reading.

Comprehensively, the studies that have been reviewed imply that metacognitive reading strategies are positively related to the reading comprehension of ESL learners, but the degree of their effect on the latter varies. There is always the problem-solving strategies which are considered the most influential and the global and support strategies are complementary. The ambivalent quality of the results indicates that more studies should be conducted to determine the impact of instructional situations, student traits, and academic subjects on the relationship between the application of metacognitive strategies and reading comprehension at the tertiary level.

Objective 3: To critically evaluate the effectiveness of planning, monitoring, and evaluative meta-cognitive reading strategies as reported in peer-reviewed studies on academic reading comprehension

Numerous empirical studies show that instruction in metacognitive reading strategies (including planning, monitoring and evaluating) can significantly improve academic reading comprehension. For example, Zhang (2008) and Jafari (2012) reported that strategy-based instruction (covering all three phases) produced greater gains on IELTS or to Metacognitive reading strategies are the conscious plans and controls that readers use before, during, and after reading to regulate comprehension. Researchers typically distinguish three phases: planning (before reading), monitoring (during

reading), and evaluating (after reading) (Thongwichit & Adcharawan 2021). Planning strategies (also called global or pre-reading strategies) include setting a reading purpose, previewing text features (titles, headings, illustrations) and making predictions; their function is to “prepare the reader’s cognition to grasp the overview of the text” (Al-Kiyumi et al. 2021). Monitoring strategies (sometimes called problem-solving strategies) are applied during reading to check understanding (for example by self-questioning, summarizing, clarifying or inferring meaning). Evaluative strategies (post-reading or support strategies) involve reviewing and reflecting on what has been read – for example, clarifying unclear points, connecting ideas, formulating questions or opinions about the text – in order to consolidate comprehension. In practice these phases overlap: skilled readers habitually “preview” a passage, predict and question as they read, and later “evaluate” by summarizing or revisiting confusing parts.

Conscious plans and control methods used by readers to help them understand what they are reading includes metacognitive reading strategies. Researchers group the phases of metacognitive strategies into three areas - namely, Planning (the period before a reader begins to read), Monitoring (during reading), and Evaluative (after the completion of reading) (Thongwichit & Adcharawan 2021). Planning Strategies (or Pre-Reading Strategies) include identifying a reason for reading the material being read; reviewing specific features of a book; predicting what the content will cover, and prepare the reader's ability to understand the element of the material (Al-Kiyumi et al. 2021). Monitoring strategies (also known as Problem Solving Strategies) are methodologies that assist the reader to accurately interpret their comprehension of the material they are currently reading (such as through self-questioning, summaries, interpretation, or inferring the meaning). Evaluative Strategies (Post-Reading Strategies) include reviewing and reflecting on the materials read, clarifying areas of confusion, linking concepts together, asking questions about or providing opinions regarding materials that were part of the reading, are done to reinforce comprehension of what was read. There is often overlap between these three phases of metacognitive strategies as skilled readers routinely utilize the length of the materials they are reading through 'previewing,' predicting, and self-questioning, while also utilizing 'evaluating' by summarizing or reflecting on unclear materials.

In a quasi-experimental study of EFL learners in Iran, Habibian (2015) discovered that metacognitive

instruction enhanced both test scores as well as students' beliefs regarding their own thought processes. A recent study conducted by Yapp et al. (2021) has reached the same conclusion as Habibian's data related to Iranian EFL learners. A meta-analysis of the findings of Yapp et al. suggest that L2 learners should be trained on as broad a range of L2 reading related higher order strategies as is possible; such strategies should be identified and taught explicitly. In the case of developing both cognitive and metacognitive strategies, Yapp et al. identified some specific areas of overlap between cognitive and metacognitive strategies in the context of reading; furthermore, the use of both types of strategy has positive effects on overall reading comprehension and transferability to new reading material.

The broad body of evidence presented indicates some trends regarding the relative effectiveness of the three stages in reading comprehension. Self-monitoring, the process of actively checking oneself as you read, often seems to be one of the most important strategies used when reading. Examples of this strategy in use by international learners studying at university were reported in a qualitative study (Rahayu et al.), in which learners from four different countries (Bangladesh, Indonesia, Taiwan, and Vietnam) used monitoring strategies to help them resolve difficulties experienced while reading difficult academic texts. Articles by Goodman and Duke & Pearson provide an illustration that supports this idea. They emphasize that effective readers are continuously evaluating and asking questions of themselves about the material they have read. Thus, it is likely that monitoring will consistently be associated with increased comprehension of reading material.

Planning strategies may improve reading, but their benefit is less direct than that of monitoring strategies. For example, readers will be better able to apply their preview and purpose if they know what they want to achieve before they start reading, but researchers (e.g., Phakiti, 2006) found that these planned strategies have very little direct effect on cognitive processing. Rather, planned strategies may facilitate cognitive processes through the use of monitoring strategies, that is, attention is allocated according to task expectations, but the amount of comprehension improvement depends on the reader's ability to keep track of understanding while they are reading (Phakiti, 2006). Therefore, simply instructing students on pre-reading activities (such as skimming and predicting) will not result in substantial gains in comprehension unless readers also implement monitoring checks. Consistent with this, an experiment in Pakistan showed that pre-

reading support provided to students by their professors did not lead to an increase in the use of planning strategies; however, results showed that pre-reading support significantly correlated with an increase in students' use of monitoring and evaluating strategies. Thus, while planning is essential to establish a foundation for comprehension, learners must continue to monitor their comprehension as they proceed with the reading activity.

The use of evaluation (post-reading) as a strategy may support learner success. Readers may be encouraged to summarize, reflect or ask questions about their reading once they have finished. Evaluative strategies can consolidate the comprehension of material read and provide learners with an opportunity for deeper processing. However, relatively few studies actually account for the impact of only evaluative strategies after the reading of material has been completed. In addition, many other interventions on comprehension (e.g., mixed-methods interventions) include the training of planning and monitoring strategies along with evaluative strategies. It is, therefore, difficult to attribute any overall improvement to solely evaluative strategies; thus, it is important to view the combination of strategies collectively. The purpose of evaluative strategies is to provide an opportunity for learners to clarify points of ambiguity, connect ideas that are related and to develop opinions about content that is relevant to them in order to strengthen retention and better understand the content. Although learners who are aware of how to apply evaluative checks (e.g., self-reviewing their understanding, summarising material read) appear to have greater success in terms of achievement, these strategies probably will be most beneficial for students possessing fundamental curricular skills and cognitive resources.

Learner profiles and instructional conditions act as moderators of how effective any particular approach may be for readers; therefore, readers with greater proficiency and experience tend to plan and monitor more flexibly. As an example, Madhumathi and Ghosh (2012) indicate that advanced Indian university level students are capable of selecting the best strategies to plan and monitor their reading comprehension while lower-level students do not and will greatly benefit by having explicit strategy training. Thus, it can be presumed that students who are weak or at lower levels will show greater gains as a result of strategy training compared to students who possess strong abilities. Additionally, higher level students may have developed planning behaviours (for example, previewing) already and,

therefore, will benefit from instruction on the development of more complex evaluative or (in this case) monitoring behaviours.

Various contexts can influence one's academic performance on a standardized test (TOEFL, IELTS, CET-6, etc.) based on how much the individual uses different cognitive strategies, such as planning and monitoring. In a study conducted by Phakiti (2006) regarding the administering of timed reading tests, he found that while there was no significant direct association between the use of planning strategies with regard to the test outcome, there was an indirect relationship (via monitoring), as using only the planning strategy alone did not support the regulation of one's comprehension of the material being read. In contrast, in less time-restricted and more authentic forms of academic reading (textbooks, reading from within a specific field), the use of pre-reading planning strategies, such as activating prior knowledge, can positively influence an individual's performance; this is even more pronounced when combined with group analysis or note-taking, both being types of evaluative methods. In some research examining English for Specific Purposes (e.g., Medical or Engineering English), the use of anticipatory planning strategies (e.g., Don't Forget to pre-teach vocabulary etc.) have positively impacted the student's understanding of specialized texts while continuing to support metacognitive validation during the reading process.

Evidence from a growing body of peer-reviewed research demonstrates that training future academic L2 readers to use planning, monitoring and evaluating metacognitive strategies improve their comprehension of academic texts; this was especially true for many L2 readers in higher education (tertiary) institutions. Monitoring (self-checking) behaviours have historically emerged as predictors of comprehension gain; thus, interventions should teach skills related to monitoring for and correcting comprehension failures in real-time. Providing L2 readers with planning strategies help orient and engage them; however, the benefits of planning strategy on comprehension are indirectly influenced by monitoring. Evaluating strategies also help reinforce learning through encouraging students to reflect on their understanding and integrate what was learned from the text. Weaker L2 readers in ESL/EFL, particularly many L2 readers who call South Asia home, are likely to benefit more from explicit instruction on L2 reading while more proficient L2 readers use planning, evaluating, and monitoring to enhance their independence as learners. Each of these examples illustrates that

reading intentionally (forward anticipating what to read, self-checking comprehension, and reviewing what was read) is a common trait of successful academic L2 readers and that explicitly teaching these metacognitive behaviours enhances the development of an L2 reader's ability to comprehend academic texts at an advanced level.

5. DISCUSSION

This paper is a critical analysis of peer-reviewed studies that investigated the effectiveness of planning, monitoring, and evaluative metacognitive reading strategies in enhancing academic reading comprehension in tertiary level ESL learners. The literature reviewed has repeatedly shown that application of metacognitive reading strategies leads to enhanced comprehension but the strength of the relationship differs between different contextual factors including the proficiency of learners, instructional methods, and academic requirements.

In all the studies examined, monitoring strategies appeared to be the most effective ones in facilitating reading comprehension. Such strategies would allow the learners to actively monitor their comprehension during reading and solve comprehension problems anytime they occur. Although studies have been carried out in various ESL and EFL settings, self-monitoring behaviours emerge as the major aspects of enhanced understanding, especially when students are reading thick or conceptually demanding academic materials. These strategies seem to have particular advantage among the learners who have difficulties in academic reading requirements.

Planning strategies, such as previewing, mobilizing already possessed knowledge, and reading objectives, are involved in contributing to the comprehension in an indirect way. Although these strategies enable the reader to develop a general framework of understanding a text, it is also indicated that planning cannot result in high levels of comprehension without being supplemented by active monitoring in the process of reading. This is a point of major concern when it is necessary to combine pre-reading tasks with direct teaching on the need to monitor and control the understanding process in real-time.

The evaluative strategies can be implemented once the reading is over and facilitate further processing by summarising the material, contemplating on the content, and critically analysing the insights gained. Even though there is not much research specifically devoted to the impacts of evaluative strategies, the existing evidence indicates that learners that evaluate

their understanding of the texts on a regular basis are more likely to show higher levels of retention and more advanced reading of the texts. These measures seem to be especially effective with the learners that have enough language proficiency and cognitive resources at their disposal.

The moderating factors of the effectiveness of the metacognitive strategies are learner characteristics and conditions of instruction. Less developed ESL readers such as most tertiary level students in the Indian setting, respond best to the systematic and orderly teaching of metacognitive reading skills. All in all, the results indicate that balanced teaching that includes planning, monitoring, and evaluative strategies and that focuses on monitoring in particular is critical to facilitating the development of academic reading comprehension among ESL students, including those undergraduate students studying Commerce (B.Com) and most of whom are required to read academic and professional texts in the English language.

6. CONCLUSION

The review investigated how the use of metacognitive reading strategies influences reading comprehension of tertiary level English as a second language (ESL) learners with special focus on the Indian higher education setting. Based on peer-reviewed empirical studies, the paper presents the significance of metacognitive awareness and strategic control of reading as the main factors of academic success in post-secondary settings where students are expected to read challenging scholarly and professional materials in English.

The results suggest that ESL learners at the tertiary level show an intermediate level of awareness and application of strategies of metacognitive reading. The strategies that are most commonly used in problem solving and monitoring are used mostly in cases where the learners have problems with comprehension. On the contrary, planning and evaluative strategies are employed less frequently, which implies a lack of involvement in all the steps of the reading process. This is particularly noticeable in the Indian case since the available literature (primarily comprising of surveys) does not provide much information on how students systematically plan, monitor and assess their reading, especially when it comes to undergraduate students of Commerce (B.Com).

In general, the literature analyzed validates that metacognitive reading strategy has a beneficial effect on reading comprehension, but the degree of its impact differs depending on circumstances. The

proficiency of learners, the practices used in teaching them, the assessment techniques, as well as academic areas, are some of the factors that affect the efficiency of these strategies in promoting understanding. Irrespective of these differences, one agreement of all studies is that learners who are more metacognitively aware and flexible to a greater extent are able to attain greater levels of reading comprehension.

The critical analysis also indicates that efficient comprehension of reading is based on the combined application of planning, monitoring, and evaluative strategies. Monitoring strategies have the directest role in facilitating the comprehension whereas planning and evaluation offers the necessary structural facilitation to understanding and

retention. These strategies help learners to become more independent and able to direct their reading independently which is key to success in higher education.

Conclusively, the results highlight the cognitive importance of explicit and systematic teaching of metacognitive reading strategies in tertiary education of foreign language learners. The future research interest must also be longitudinal and discipline-based research in the Indian context especially on the students of Commerce (B.Com) so that the metacognitive strategy instruction could be used to match different reading requirements of academic tasks and help the ESL students comprehend better in the post-secondary environment.

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