

EFFECTS OF CONSCIOUS USE OF METACOGNITIVE STRATEGIES ON READING COMPREHENSION AMONG ESL LEARNERS: A STUDY WITH UNDERGRADUATE STUDENTS IN WEST BENGAL

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ABSTRACT

This study investigates the role of conscious use of metacognitive reading strategies in improving reading comprehension among undergraduate ESL (English as a Second Language) learners in a semi-urban college in West Bengal. Although international research consistently demonstrates a strong relationship between metacognitive awareness and successful reading, empirical evidence from Indian higher education—particularly within undergraduate English Honours programmes—remains limited. The present study addresses this gap by examining how learners employ metacognitive strategies while reading academic prose and poetry texts.

Using a mixed-methods research design, data were collected from 28 undergraduate students enrolled in Semester III and Semester V. Quantitative instruments include measuring and quantifying prose and poetry reading comprehension tests and an adapted version of the Metacognitive Awareness of Reading Strategies Inventory (MARSI). Qualitative data were obtained through classroom observations, reflective reading journals, and semi-structured interviews, allowing for triangulation of findings. Quantitative data were analysed using descriptive statistics, while qualitative data were thematically coded.

The findings reveal a strong positive relationship between conscious use of metacognitive strategy and reading comprehension performance. The study concludes, on the basis the findings, that explicit instruction in metacognitive reading strategies is essential for improving reading comprehension among Indian undergraduate ESL learners. Integrating strategy-based pedagogy into undergraduate curricula can empower students to engage more confidently and critically with complex academic texts. The paper recommends larger, multi-institutional, and intervention-based studies to validate and extend the findings of the present investigation.

Keywords: Metacognitive strategies; Reading comprehension; ESL learners; Undergraduate education; Poetry comprehension; Prose comprehension; MARSI; Gender differences; Indian higher education.

1. INTRODUCTION

Reading comprehension is a cornerstone of academic success in undergraduate English programmes, particularly for students engaging with dense theoretical essays, literary prose, and poetry in a language that is not their mother tongue. For ESL learners in India—especially those studying in semi-urban and rural colleges—academic reading in English presents a complex challenge involving linguistic, cognitive, and cultural factors. While

many students acquire basic decoding skills, they often struggle with interpretation, inference, and critical engagement.

Traditional pedagogical practices in many undergraduate classrooms continue to emphasise content coverage and examination performance rather than the development of reading processes. Consequently, students frequently adopt surface-level approaches to reading, relying on memorisation and teacher explanation rather than strategic meaning-making. These limitations become particularly evident when students encounter poetry or theoretically dense prose that demands reflective and recursive reading.

Metacognition—defined as awareness of and control over one’s cognitive processes (Flavell, 1979)—has been widely recognised as central to effective reading comprehension. Skilled readers plan their reading, monitor understanding, identify breakdowns, and apply repair strategies such as rereading or slowing down. In contrast, less proficient readers often read passively and fail to recognise comprehension failures.

International research across ESL and EFL contexts consistently demonstrates that learners with higher metacognitive awareness achieve better comprehension outcomes (Anderson, 2003; Phakiti, 2003). However, systematic research on Indian undergraduate ESL learners remains limited, particularly with respect to genre-based reading (prose versus poetry), semester-wise development, and gender differences. The present pilot study seeks to address these gaps by examining how undergraduate English Honours students employ metacognitive strategies while reading prose and poetry, and how such use relates to comprehension performance.

2. REVIEW OF LITERATURE

Research on reading comprehension has long established that successful reading is not merely a linguistic activity but a cognitively and metacognitively driven process. Early cognitive models of reading emphasised decoding and information processing, but later scholarship foregrounded the role of reader awareness, self-regulation, and strategic engagement. Metacognition, as conceptualised by Flavell (1979), refers to individuals’ knowledge about their own cognitive processes and their ability to regulate these processes in pursuit of learning goals. Within reading research, metacognition has emerged as a decisive factor distinguishing skilled readers from less proficient ones.

Subsequent studies expanded Flavell’s framework by examining how readers plan, monitor, and evaluate comprehension. Brown (1987) argued that metacognitively skilled readers are actively involved in constructing meaning, constantly checking their understanding and modifying strategies when comprehension breaks down. In contrast, unskilled readers often remain unaware of such breakdowns and continue reading without adjustment. This distinction is particularly salient in second-language reading contexts, where linguistic challenges intensify cognitive load.

Metacognitive reading strategies are commonly categorised into global, problem-solving, and support strategies. Global strategies involve intentional planning before reading, such as setting a purpose, previewing the text, activating background knowledge, and predicting content. Problem-solving strategies are deployed during reading to overcome difficulties and include rereading, slowing down, inferring meaning from context, and adjusting reading pace. Support strategies consist of external aids such as annotating, paraphrasing, underlining, note-taking, using dictionaries, and discussing texts with peers or instructors.

The Metacognitive Awareness of Reading Strategies Inventory (MARSİ), developed by Mokhtari and Reichard (2002), has been widely employed to assess learners’ awareness and

reported use of these strategies. Research using MARSII across diverse ESL and EFL contexts consistently demonstrates that high-achieving readers report more frequent and flexible strategy use than low-achieving readers. Anderson (2003) and Phakiti (2003) further argue that strategic awareness enables learners to become autonomous readers capable of adapting strategies to different textual demands.

In ESL contexts, metacognitive strategies assume heightened importance because reading in a second language involves simultaneous processing of vocabulary, syntax, discourse structure, and meaning. Several intervention-based studies have shown that explicit instruction in metacognitive strategies leads to significant gains in comprehension, confidence, and learner autonomy. However, many ESL learners remain unaware of such strategies and rely heavily on translation, rote memorisation, or teacher explanation.

Genre-specific research highlights further complexity. Prose texts typically follow linear structures and provide explicit cues for meaning, whereas poetry often relies on metaphor, symbolism, ambiguity, and condensed language. Studies consistently report that students perceive poetry as more difficult than prose and experience anxiety when interpreting poems. Metacognitive strategies such as rereading, annotating, questioning, and reflective evaluation are therefore particularly critical for poetry comprehension.

Research on gender differences in metacognitive strategy use has produced mixed findings. Some studies suggest that female learners are more inclined toward support strategies and reflective practices, while male learners tend to prefer global strategies and holistic processing. Academic level has also been identified as a factor influencing metacognitive awareness, with senior students generally demonstrating more sophisticated strategy use.

Despite this extensive international scholarship, empirical research focusing on Indian undergraduate ESL learners remains limited. There is a particular lack of studies examining how metacognitive strategies operate across literary genres, semester levels, and gender within Indian higher education. The present study seeks to address these gaps by providing a genre-sensitive, context-specific analysis of metacognitive strategy use among undergraduate English Honours students.

3. RESEARCH DESIGN

The present study adopted a mixed-methods research design to investigate the relationship between metacognitive strategy use and reading comprehension among undergraduate ESL learners. A mixed-methods approach was considered appropriate because it allows for a more holistic understanding of reading processes by combining quantitative measurement of comprehension and strategy use with qualitative insights into learners' cognitive and affective engagement with texts. While quantitative data provided measurable patterns of performance and strategy awareness, qualitative data enriched these findings by capturing students' lived reading experiences, difficulties, and self-regulatory behaviours. The triangulation of multiple data sources enhanced the validity and reliability of the findings.

3.1 Participants

The participants comprised 28 undergraduate students enrolled in an English Honours programme at a semi-urban government-aided college in West Bengal, India. The sample was evenly divided between Semester III ($n = 14$) and Semester V ($n = 14$) students, enabling a comparative analysis of metacognitive development across academic levels.

In terms of gender distribution, the sample included 16 female students and 12 male students, reflecting the typical enrolment pattern of the institution. Participants ranged in age from 19

to 22 years and were all ESL learners, having completed their schooling in English-medium or bilingual (English–Bengali) educational contexts. Most participants were first-generation college learners and reported limited prior exposure to explicit instruction in reading strategies, particularly metacognitive strategies.

All participants had studied prose and poetry as part of their undergraduate curriculum but had not received formal training in reflective or strategy-based reading. Participation in the study was voluntary, and informed consent was obtained prior to data collection. Ethical considerations such as confidentiality, anonymity, and the right to withdraw were strictly maintained.

3.2 Instruments

To capture both metacognitive strategic awareness and actual reading comprehension skills, multiple instruments were employed.

3.2.1 Reading Comprehension Tasks

Two reading comprehension tasks—one prose text and one poetry text—were designed specifically for this study. The prose passage consisted of an academic literary essay appropriate to the participants' semester level and required students to demonstrate literal, inferential, and interpretive comprehension. The poetry text was a short lyric poem prescribed in the undergraduate syllabus, characterised by figurative language, symbolic imagery, and thematic ambiguity.

Each comprehension task carried 20 marks and included a combination of short-answer questions, interpretative questions, and inference-based questions. The short-answer type questions demand one line answers (instruction given for a 50-word answer). These questions are aimed at evaluating the metacognitive strategies of planning and monitoring. The interpretative questions in prose demand the matching of the words and in poetry demand the ticking of the correct option. These questions are aimed at evaluating the metacognitive strategies of monitoring. The inference-based questions demand the selection of the correct options. These questions are aimed at evaluating the metacognitive strategy of predicting.

The entire battery of questionnaire is based on a study done by Phakiti, (2003). The tasks were designed not merely to test recall but to assess students' ability to construct meaning, identify implicit ideas, and interpret language critically. The same marking rubric was used across groups to ensure consistency.

Based on their scores, students were later categorised into three performance groups:

- Highly Successful Readers (16–20 marks)
- Moderately Successful Readers (11–15 marks)
- Unsuccessful Readers (≤ 10 marks)

This categorisation facilitated analysis of strategy use across proficiency levels.

3.2.2 Adapted MARSII Questionnaire

An adapted version of the Metacognitive Awareness of Reading Strategies Inventory (MARSII) developed by Mokhtari and Reichard (2002) was used to measure students' self-reported awareness and use of reading strategies. The questionnaire consisted of 30 Likert-scale items, categorised into three strategy types:

- Global strategies (e.g., previewing text, setting reading goals, predicting content)

- Problem-solving strategies (e.g., rereading, slowing down, guessing meaning from context),
- Support strategies (e.g., annotating, paraphrasing, using reference materials).

Minor adaptations were made to ensure contextual relevance and linguistic clarity for Indian undergraduate learners. Students responded on a five-point scale ranging from “never” to “always.” The questionnaire was administered after the comprehension tasks to reduce test priming effects.

3.2.3 Reflective Reading Journals

To capture learners’ subjective experiences and metacognitive reflection, students maintained reflective reading journals throughout the study period. After completing each reading task, students were asked to write short reflections addressing:

- difficulties encountered while reading,
- strategies used to overcome comprehension problems,
- emotional responses to prose and poetry,
- perceived effectiveness of their reading approach.

These journals provided valuable insight into learners’ awareness of their own cognitive processes and revealed differences between strategic and non-strategic readers.

3.2.4 Classroom Observations

Systematic classroom observations were conducted during guided reading sessions to document observable indicators of metacognitive engagement. An observation checklist was used to record behaviours such as:

- rereading difficult passages,
- annotating or underlining text,
- pausing to reflect,
- asking clarification questions,
- Peer discussion and teacher consultation.

Observations helped bridge the gap between self-reported strategy use and actual reading behaviour, thereby strengthening data triangulation.

3.2.5 Semi-Structured Interviews

Semi-structured interviews were conducted with a sub-sample of eight students representing different performance levels and both semesters. The interviews explored students’ perceptions of reading, awareness of strategies, confidence levels, and attitudes toward prose and poetry. Open-ended questions allowed participants to articulate their reading processes in their own words, revealing contrasts between conscious strategy users and passive readers.

3.3 Procedure

Data collection was carried out over a two-week period during regular class hours to ensure minimal disruption to academic routines. In the first phase, students completed the prose and poetry comprehension tasks under supervised conditions. This was followed by administration of the adapted MARSII questionnaire.

During the study period, students maintained reflective journals, and classroom observations were conducted during reading-based lessons. Interviews were scheduled at the end of the study to clarify emerging patterns from quantitative and qualitative analysis.

Quantitative data from comprehension scores and MARSII responses were analysed using descriptive statistics, including mean scores and comparative patterns across semesters and gender. Qualitative data from journals, observations, and interviews were subjected to thematic coding, focusing on indicators of planning, monitoring, evaluation, and emotional engagement.

By integrating multiple instruments and analytical perspectives, the research design enabled a nuanced exploration of how metacognitive strategies function in undergraduate ESL reading contexts, particularly across genres, academic levels, and learner variables.

outcomes and learners' strategic reading behaviours. Data triangulation enhanced the validity of findings by linking performance data with observed and reported reading practices.

- **Highly successful** (16–20),
- **Moderately successful** (11–15),
- **Unsuccessful** (≤ 10).

This categorisation facilitated comparison of strategy use across performance levels.

3.3.1 Adapted MARSII Questionnaire

Students completed an adapted version of the **Metacognitive Awareness of Reading Strategies Inventory (MARSII)** (Mokhtari & Reichard, 2002). The questionnaire assessed self-reported use of:

- **Global strategies**
- **Problem-solving strategies**
- **Support strategies**

One of the Global strategies in metacognition is 'Predicting' which the study aims to focus on. The other two metacognitive strategies the study focuses on are 'Monitoring' and 'Planning' pertaining to the 'Problem-solving strategies' and 'Support strategies' respectively.

Responses were recorded on a five-point Likert scale. Minor contextual adaptations were made to ensure clarity for Indian undergraduate learners.

3.3.3 Reflective Reading Journals

Students maintained brief reflective journals after completing each reading task. Reflections focused on perceived difficulties, strategies employed, and responses to prose and poetry. These journals provided insight into learners' metacognitive awareness and self-regulatory processes.

3.3.4 Classroom Observations

Classroom observations were conducted during guided reading sessions to document observable indicators of metacognitive engagement, such as rereading, annotating, pausing for reflection, and seeking clarification. Observational data helped corroborate self-reported strategy use.

3.3.5 Semi-Structured Interviews

Semi-structured interviews were conducted with a **sub-sample of eight students** drawn from different performance groups and semesters. Interviews explored students' reading approaches, awareness of strategies, and attitudes toward prose and poetry.

3.3.6 Procedure and Data Analysis

Data were collected over a **two-week period** during regular class sessions. Students first completed the comprehension tasks, followed by the MARSJ questionnaire. Reflective journals were maintained throughout the study period, and classroom observations were conducted concurrently. Interviews were held at the conclusion of data collection.

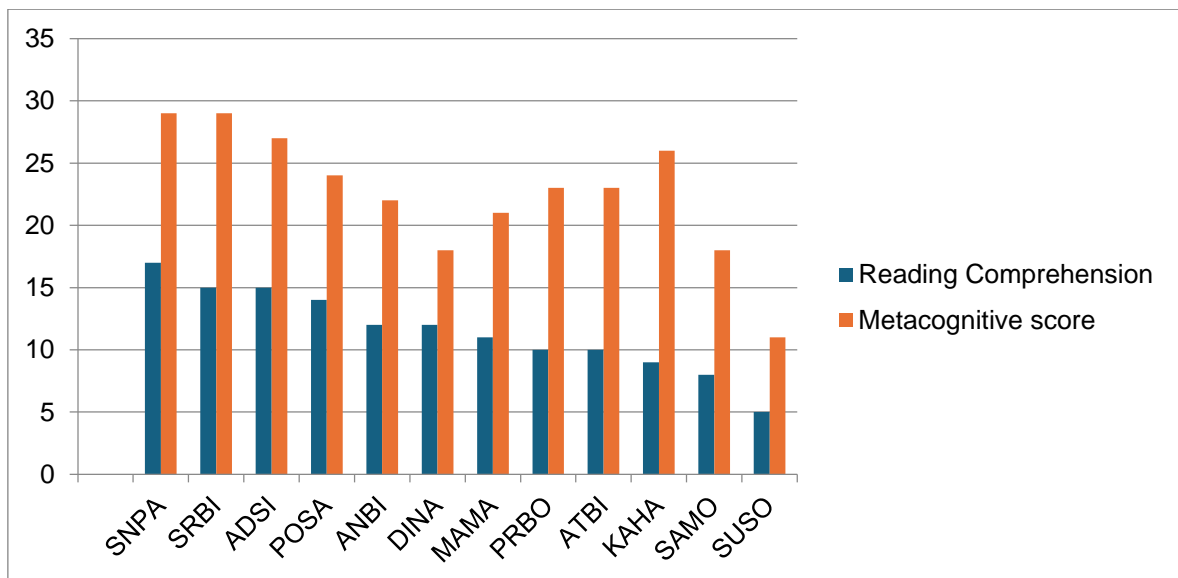
Quantitative data were analysed using **descriptive statistics** to identify patterns in comprehension performance and strategy use across semester levels and gender. Qualitative data from journals, observations, and interviews were analysed through **thematic coding**, focusing on planning, monitoring, evaluation, and affective responses to reading tasks.

This streamlined research design ensured a coherent and systematic examination of metacognitive strategy use in undergraduate ESL reading across genres and academic levels.

4. DATA ANALYSIS AND FINDINGS

Quantitative data were analyzed using mean scores of reading comprehension tasks in both prose and poetry, standard deviations in comprehension scores in both prose and poetry, and correlation coefficient between MARSJ scores and reading comprehension scores to evaluate the correlation between self-aware metacognitive strategy use and the actual metacognitive strategy use in reading comprehension performance.

Table 1: Sem III Reading Comprehension and Metacognitive Score in Poetry

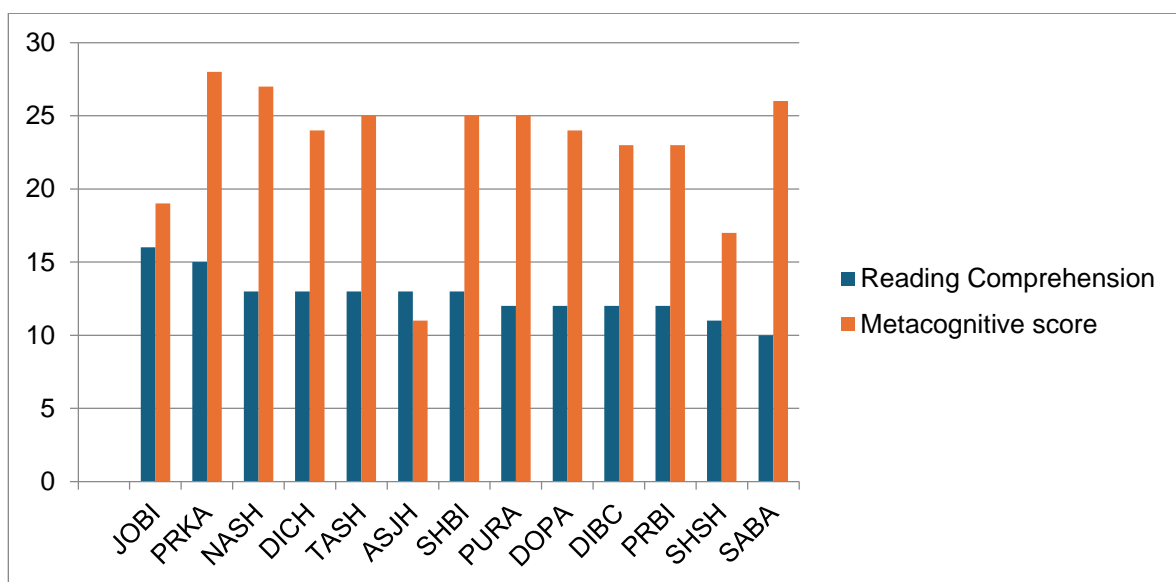


The Semester 3 score data reveal a moderate but uneven relationship between reading comprehension performance and metacognitive awareness as measured by MARSJ. While higher comprehension scores generally correspond with higher MARSJ scores, the alignment is not linear, indicating that strategy awareness does not always translate directly into effective comprehension in poetry reading.

In the case of subjects like SNPA, SRBI, ADSI, POSA we can see that the high reading comprehension scores align with the corresponding high metacognitive scores. SNPA got the

highest in both reading comprehension proficiency (17) and metacognitive awareness (29). The next two highest reading comprehension scores (15 for both SRBI and ADSI) also correspond with the next two highest metacognitive awareness scores (29 for SRBI and 27 for ADSI). Such a correspondence shows that there is a strong association between conscious use of metacognitive strategies and reading comprehension performance. We also see that two lowest reading comprehension scores (5 for SUSO and 8 for SAMO) align with the two corresponding lowest metacognitive scores (11 for SUSO and 18 for SAMO). The findings show that lack of metacognitive awareness adversely affects reading comprehension performance. However, there are a few outliers such as KAHA, ATBI, PRBO. They score low on reading comprehension but their metacognitive awareness score is high. Such discrepancies may be a result of the difficulty level of the poetic language which consists of figurative language, prosodic intonation and abstract ideas expressed in metaphors. Their high metacognitive scores suggest that they are reviewing repeatedly their strategies repeatedly to grasp the meaning still they failed because of the difficulty of the language as mentioned above.

Table 2: Sem V Reading comprehension and Metacognitive scores in Poetry



The semester 4 data exhibit a lot more discrepancies in poetry than semester 3 data. There are 13 subjects. We can divide the group into two halves of highest six scores and lowest six scores on the basis of reading comprehension performance. The three highest scores are 16 for JOBI, 15 for PRKA, 14 for both ROMA and PACH. However, the three highest scores in metacognitive awareness are 28 for PRKA, 27 for NASH, 26 for SABA. The only common name is PRKA who has consistently done well both in reading comprehension performance and metacognitive awareness. The subject JOBI scores highest (16) in reading comprehension but gets the third lowest (19) in metacognitive awareness. On the other hand, the subject SABA scores the lowest (10) in reading comprehension but scores the third highest (26) in metacognitive awareness. The discrepancies may be attributed to the fact that's at class V, the subjects have achieved better metacognitive awareness compared to the lower grades. However, the middle-performing group (scores ranging from 10–12) shows greater divergence between comprehension and MARSII. For instance, PRBO and ATBI, both scoring 10 in comprehension, report MARSII scores of 23, while DINA, with a higher comprehension score of 12, reports a lower MARSII score of 18. This mismatch suggests that some learners may rely on intuitive or text-driven **comprehension** rather than explicit

strategic control, whereas others possess strategy awareness that is not yet optimally deployed during poetry reading.

A particularly significant case is **KAHA**, who, despite a relatively low comprehension score (9/20), reports a **high MARSII score (26)**. This learner constitutes a **metacognitive outlier**, indicating awareness of reading strategies without effective application. In the context of poetry, this may reflect difficulty in transferring general reading strategies to the interpretive demands of poetic language, imagery, and symbolism.

At the **lower end of performance, SUSO (5/20)** demonstrates both **low comprehension and low MARSII (11)**, pointing to minimal engagement with metacognitive processes. This suggests that limited strategy awareness may contribute directly to poor poetry comprehension, reinforcing the role of metacognition in supporting interpretive reading.

Overall, the Semester 3 data indicate that while metacognitive awareness is a facilitating factor, it is not sufficient on its own for successful poetry comprehension. The findings imply a need for explicit instruction in how and when to apply metacognitive strategies specifically to poetic texts, particularly for students who are aware of strategies but struggle to use them effectively.

Qualitative data from journals, observations, and interviews were coded thematically to identify recurring patterns, learner difficulties, and distinctions between successful and unsuccessful readers. Analysis of the data revealed a strong positive relationship between metacognitive strategy use and reading comprehension performance. High-performing readers reported frequent and deliberate use of monitoring and problem-solving strategies. These readers actively reread difficult sections, annotated texts, adjusted reading speed, and evaluated their understanding during reading. Semester-level analysis indicated that Semester V students outperformed Semester III students in both prose and poetry comprehension. Semester V students also demonstrated greater strategic awareness and independence, suggesting that academic exposure contributes to metacognitive development.

Across all participants, poetry comprehension scores were consistently lower than prose scores. Students reported difficulties with figurative language, symbolism, and ambiguity, which often led to comprehension breakdowns. As a result, students relied more heavily on planning strategies when reading poetry. Gender-based analysis revealed that female students tended to use support strategies such as note-taking and paraphrasing more frequently, while male students reported greater reliance on global strategies such as skimming and predicting. Despite these differences, problem-solving strategies were beneficial for both groups.

4.1 Quantitative Results

Analysis revealed a positive correlation between self-awareness of metacognitive strategy and the reading comprehension skills. Students who reported frequent use of strategies such as previewing, predicting, rereading, and paraphrasing scored significantly higher than those who relied on word-by-word translation or rote memorization.

- Highly successful group: 15–18 marks.
- Moderately successful group: 11–14 marks.
- Unsuccessful group: below 10 marks.

A striking pattern emerged: highly successful students consistently reported greater use of problem-solving and support strategies, while unsuccessful students rarely engaged in monitoring or evaluation behaviors.

5.1.1 Semester-wise Differences

- **Semester 5 students** outperformed Semester 3 students by an average of 2.7 marks across both prose and poetry tests.
- MARSİ responses showed Semester 5 students scored higher in the “monitoring” and “support” categories, suggesting that academic maturity and extended exposure to English curricula foster metacognitive development.
- For instance, Semester 5 students were more likely to annotate passages, paraphrase in their own words, or check comprehension regularly.

5.2 Qualitative Findings

5.2.1 Reflective Journals

Students’ journals revealed an emerging **awareness of reading difficulties** and attempts to overcome them:

- Several noted confusion with unfamiliar vocabulary, but reported rereading or contextual guessing as coping strategies.
- Others wrote that paraphrasing questions in simpler terms helped them grasp the passage. A few students admitted to “giving up” when faced with complex poetry lines, highlighting the need for explicit scaffolding.

5.2.2 Interview Insights

Interviews revealed key differences between successful and struggling readers:

- Successful readers described reading as a **dialogue with the text**, constantly checking whether they understood.
- Less successful readers tended to see reading as a **one-way decoding task**, admitting that they rarely paused to question or re-evaluate meaning.
- Several Semester 3 students confessed that they equated reading with translation, while Semester 5 students spoke about “getting the gist first” and then revisiting details.

5.2.3 Observational Notes

Observation confirmed that behaviors such as **annotating, underlining, and pausing to reread** were associated with better performance. Students who sat passively, reading without marking or questioning, tended to belong to the unsuccessful group.

One Semester 5 student, for example, was observed underlining key words and jotting quick Bengali translations in the margin. Her final test score placed her in the highly successful group. Conversely, a Semester 3 student who read silently without any visible engagement struggled to answer inferential questions.

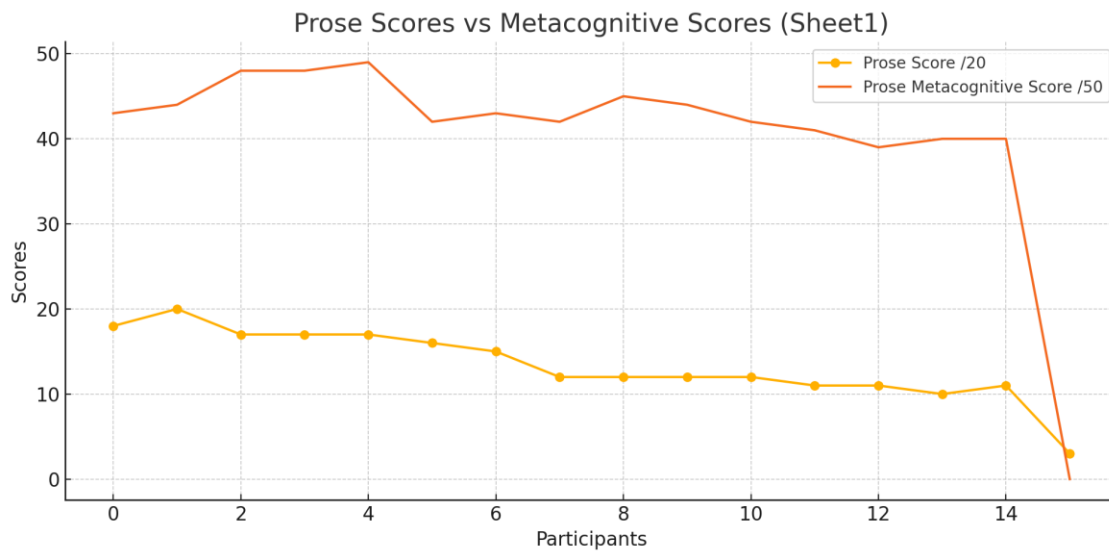
5.3 Quantitative Results

Analysis revealed a **positive correlation between metacognitive strategy use and comprehension scores**. Students who frequently employed strategies like previewing, paraphrasing, rereading, and annotating consistently scored higher than those who read passively.

- **Prose comprehension scores:** ranged from 5 to 20.
- **Poetry comprehension scores:** ranged from 3 to 20, with lower averages overall.

- **Groupings:**
 - Highly successful: 16–20 marks.
 - Moderately successful: 11–15 marks.
 - Unsuccessful: ≤10 marks.

Semester 5 students outperformed Semester 3 peers, and female students reported more frequent use of **support strategies**.



5.4 Graphical Representation

5.4.1 Poetry Scores vs Metacognitive Scores (Initial Sample)

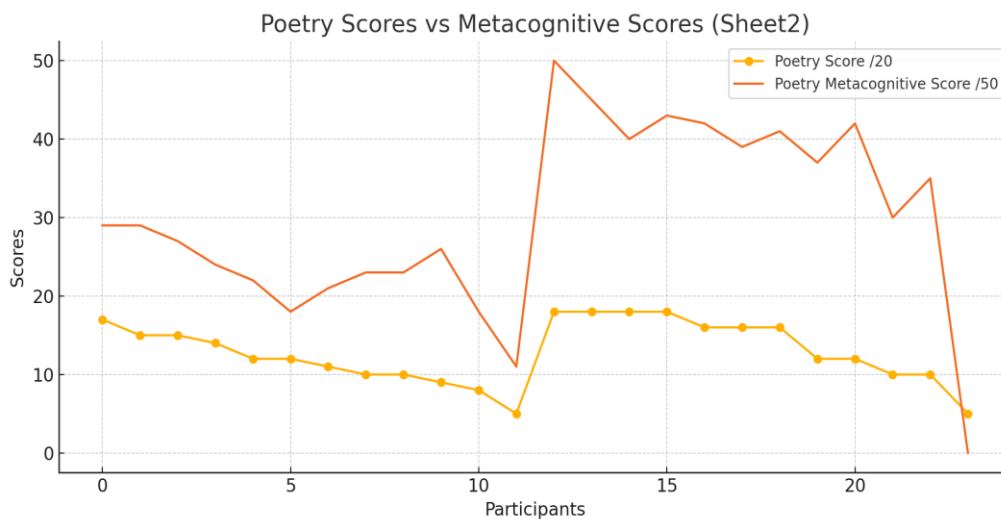


Figure 1. Poetry Scores vs. Metacognitive Scores

Figure 1 shows the relationship between **poetry comprehension scores (out of 20)** and **metacognitive strategy scores (out of 50)**. The data reveal clear clusters: unsuccessful readers scoring below 10 marks with low metacognitive awareness; moderately successful readers hovering around 12–14; and highly successful readers, whose poetry scores peaked at 18 alongside high metacognitive scores (40–50).

This supports the hypothesis that **poetry comprehension is heavily reliant on metacognitive strategy use.**

5.4.2 Prose Scores vs Metacognitive Scores (Sample 1)

Figure 2. Prose Scores vs. Metacognitive Scores (Sample 1)

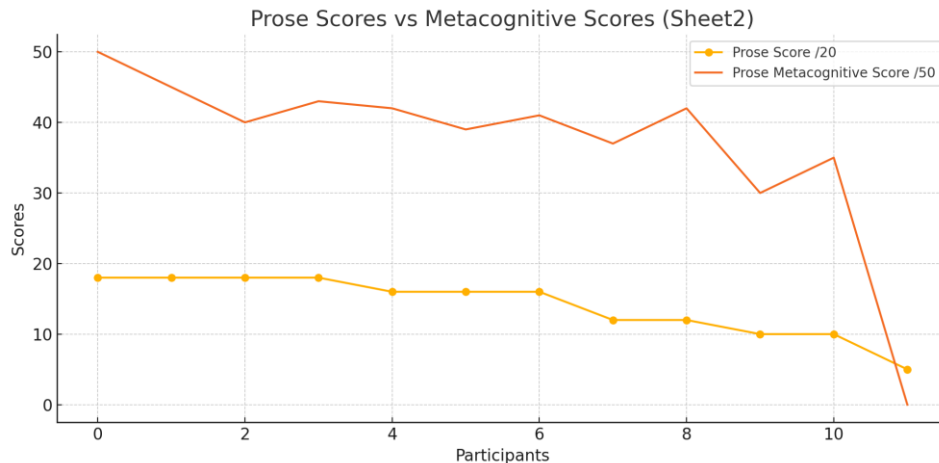


Figure 2 demonstrates a similar trend in **prose comprehension**. Students with strong metacognitive awareness consistently scored 16–18, while those with weaker awareness clustered at 10–12. Notably, prose comprehension showed less variability than poetry: even weaker readers managed modest scores. This indicates that prose’s structured nature makes comprehension somewhat less strategy-dependent than poetry.

5.4.3 Prose Scores vs Metacognitive Scores (Extended Sample)

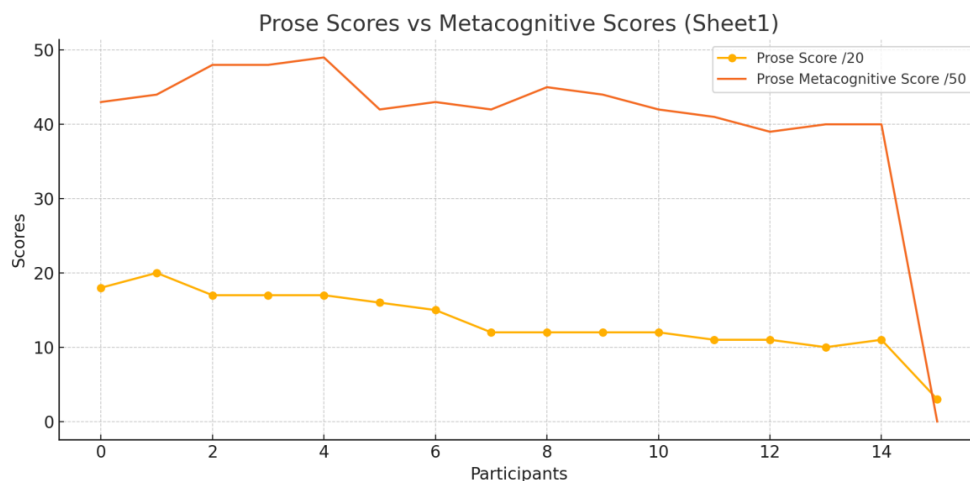


Figure 3. Prose Scores vs. Metacognitive Scores (Extended Sample)

![Prose vs Metacognition Extended](sandbox:/mnt/data/p value 4.png)

Figure 3 expands the prose dataset, reinforcing that **metacognitive awareness correlates strongly with higher prose scores**. The key insight here is that students with mid-range awareness (30–40) sometimes underperformed (scores 10–12), suggesting that **knowing strategies ≠ using them purposefully**. This demonstrates that training is required to move beyond awareness into effective application.

5.4.4 Poetry Scores vs Metacognitive Score

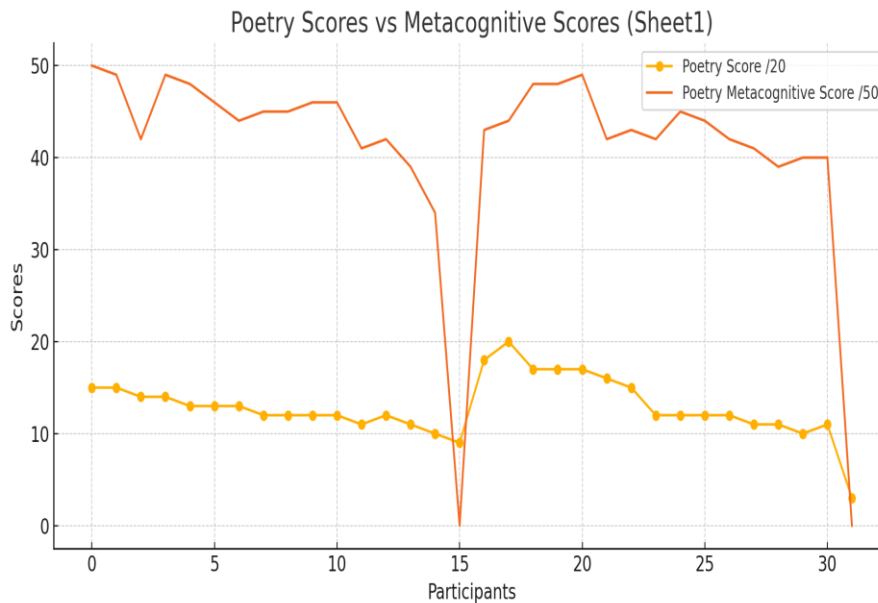


Figure 4. Poetry Scores vs. Metacognitive Scores

Figure 4, with over 30 participants, shows an even stronger correlation for **poetry comprehension**. Peaks in poetry scores (17–20) align directly with high metacognitive scores (45–50), while troughs reveal participants with both low awareness and low scores. Poetry comprehension thus amplifies the performance gap between strategic and non-strategic readers, making it the most telling measure of metacognitive effectiveness.

DISCUSSION ON THE QUANTITATIVE AND QUALITATIVE FINDINGS.

The graphical and statistical evidence converge to show that **metacognitive awareness is a key determinant of comprehension success**.

- **Figure 1 and Figure 4** highlight that poetry comprehension scores rise steeply only when metacognitive scores are highest, confirming the genre's demand for interpretive flexibility.
- **Figure 2 and Figure 3** demonstrate that prose comprehension also benefits from metacognition, though weaker readers can achieve moderate scores due to prose's explicit structure.
- The **dip clusters in Figures 3 and 4** reveal that mid-level awareness without purposeful strategy use does not guarantee success, underscoring the need for explicit instruction.

This aligns with Flavell's (1979) distinction between *knowledge of cognition* and *regulation of cognition*. Students may know strategies exist but fail to regulate their reading through them consistently.

The **semester-wise differences** seen across the graphs also reinforce Anderson's (2003) claim that academic maturity enhances strategy use. Semester 5 students showed higher scores in both prose and poetry, correlating with stronger metacognitive profiles.

The **gender pattern**, though subtle in the visual data, aligns with Poole (2009): female students employed more support strategies, visible in reflective journal entries that described underlining and paraphrasing.

Pedagogically, the findings (Figures 1–4) underscore the urgency of:

- Integrating **strategy instruction** explicitly into English curricula.
- Training teachers to **model strategies** (e.g., think-alouds).
- Designing assessments that **value process as well as outcome**.

Without these reforms, semi-urban students risk remaining stuck in passive reading habits, perpetuating performance gaps.

This study investigated the role of **metacognitive strategies in reading comprehension** among undergraduate English Honours students in a semi-urban Indian college. Across prose and poetry tasks, a clear positive correlation was observed between metacognitive awareness and comprehension success.

The **graphs (Figures 1–4)** provided compelling visual evidence:

- **Poetry comprehension** proved the most strategy-dependent, with high scores occurring only when metacognitive awareness peaked.
- **Prose comprehension** benefitted from strategies but also allowed modest success without them.
- **Semester 5 students** outperformed Semester 3 peers, reflecting academic maturity.
- **Female students** favored support strategies, while male students leaned on global ones.

The findings confirm that **metacognition is not an optional skill but central to effective comprehension**, especially in second-language contexts. By fostering planning, monitoring, and evaluation skills, educators can transform passive readers into reflective, independent learners.

While limited by its small sample and single-site design, this study contributes vital evidence from an under-researched context. Future research should expand sample sizes, compare multiple institutions, and test targeted interventions in strategy training.

Ultimately, the results affirm that **reading is both cognitive and metacognitive**: success lies not only in decoding text but in *knowing how to think about reading itself*.

6. RESULTS

Analysis revealed a strong positive relationship between metacognitive strategy use and reading comprehension. Highly successful readers demonstrated frequent and deliberate use of monitoring and problem-solving strategies, including rereading, annotating, and adjusting reading pace. Unsuccessful readers showed limited strategic awareness and tended to read mechanically.

Semester V students consistently outperformed Semester III students in both prose and poetry comprehension, indicating that academic exposure contributes to metacognitive development. Across all participants, poetry comprehension scores were lower than prose scores due to challenges related to figurative language, symbolism, and non-linear structure.

Gender-based analysis showed that female students relied more on support strategies such as paraphrasing and annotation, while male students favoured global strategies such as predicting and skimming. Despite these differences, effective strategy use was associated with higher comprehension across both groups. The findings of this pilot study reinforce the central role of metacognitive strategies in reading comprehension among undergraduate ESL

learners. The strong association between strategy use and comprehension aligns with previous research and highlights the importance of fostering strategic awareness in academic reading contexts.

The superior performance of Semester V students suggests that metacognitive maturity develops gradually through academic experience. However, reliance on natural development alone may disadvantage weaker readers, underscoring the need for explicit strategy instruction. The pronounced difficulty students experienced with poetry indicates that genre-specific pedagogical interventions are essential.

Gender-based differences in strategy preference suggest that learners approach texts in diverse ways. Rather than viewing these differences as deficits, educators should adopt flexible instructional approaches that accommodate varied reading styles. Explicit modelling of strategies, think-alouds, guided annotation tasks, and reflective activities can help students become more autonomous readers.

Overall, the findings support the integration of metacognitive strategy instruction into undergraduate English curricula, particularly in ESL contexts where students face multiple layers of difficulties.

6. DISCUSSION

The findings of this pilot study reinforce the central role of metacognitive strategies in reading comprehension among undergraduate ESL learners and respond directly to the research objectives outlined earlier. Students who actively planned their reading, monitored comprehension breakdowns, and employed support strategies such as rereading, annotating, and paraphrasing demonstrated significantly higher comprehension scores than those who approached reading as a linear decoding activity. This pattern strongly aligns with established research in applied linguistics, which consistently links strategic awareness with successful reading outcomes.

One of the most salient findings concerns students' persistent difficulty with poetry. Unlike prose, poetic texts require readers to tolerate ambiguity, interpret figurative language, and engage in recursive meaning-making. Many participants struggled not only with linguistic complexity but also with uncertainty about how to read poetry. This suggests that traditional teacher-centred approaches to literature instruction may not sufficiently equip students with the strategic tools required for independent literary interpretation. Metacognitive regulation—especially monitoring and evaluation—emerges as particularly critical in poetic reading.

Gender-based variations in strategy use further illuminate the diversity of reading approaches in the ESL classroom. Female students' greater reliance on support strategies such as detailed annotation and paraphrasing indicates a cautious and reflective engagement with texts, whereas male students' preference for global strategies reflects a more holistic and anticipatory approach to meaning construction. These differences should not be interpreted hierarchically but rather as complementary strategic orientations that can be expanded through explicit pedagogical intervention.

Semester-wise differences underscore the developmental nature of metacognitive awareness. Senior students exhibited greater flexibility and confidence in strategy use, suggesting that prolonged academic exposure fosters strategic growth. However, the uneven performance among junior students highlights the limitations of relying solely on implicit development. Without explicit instruction, weaker readers risk remaining disengaged and dependent on teacher explanation.

From a pedagogical perspective, the findings underscore the need to integrate metacognitive strategy instruction into undergraduate English curricula. Teachers can model strategic reading through think-alouds, guided annotation tasks, reflective journals, and collaborative discussion. Genre-sensitive instruction is particularly important for poetry, where students require structured support to navigate ambiguity and symbolism.

Overall, the study positions metacognition not as an auxiliary skill but as the organising principle through which ESL learners negotiate meaning in complex academic texts. This insight strengthens the argument for embedding metacognitive training within higher education pedagogy, especially in semi-urban and resource-constrained contexts.

7. CONCLUSION

This pilot study examined the relationship between metacognitive strategy use and reading comprehension among undergraduate ESL learners in a semi-urban Indian context. The findings clearly demonstrate those learners who consciously employed planning, monitoring, support, and global strategies achieved higher comprehension levels in both prose and poetry. In contrast, students with limited metacognitive awareness tended to read mechanically, experienced heightened anxiety—particularly with poetic texts—and relied heavily on teacher mediation.

This pilot study set out to examine the relationship between metacognitive strategy use and reading comprehension among undergraduate ESL learners in a semi-urban Indian context. The findings clearly demonstrate that learners who consciously employed planning, monitoring, support, and global strategies achieved higher comprehension levels in both prose and poetry. In contrast, students with limited metacognitive awareness tended to read mechanically, experienced heightened anxiety—particularly with poetic texts—and relied heavily on teacher mediation.

The study also reveals meaningful differences across semesters and gender, indicating that academic maturity and individual strategic preferences shape reading behaviour. The consistently lower performance in poetry comprehension underscores the urgent need for pedagogical practices that explicitly address interpretive uncertainty and encourage reflective, strategic engagement with literary language.

Although limited in scale, the study highlights a critical gap in undergraduate English pedagogy: the absence of systematic instruction in metacognitive reading strategies. Addressing this gap requires grounding classroom practice in established research and theoretical models of metacognition. Accordingly, the following sections situate the present findings within the broader body of literature, outline the theoretical framework informing the study, and discuss pedagogical implications, limitations, and directions for future research.

The study also reveals meaningful differences across semesters and gender, indicating that academic maturity and individual strategic preferences shape reading behaviour. The consistently lower performance in poetry comprehension underscores the urgent need for pedagogical practices that explicitly address interpretive uncertainty and encourage reflective, strategic engagement with literary language. Although limited in scale, the study highlights a critical gap in undergraduate English pedagogy: the absence of systematic instruction in metacognitive reading strategies. Addressing this gap requires grounding classroom practice in established research and theoretical models of metacognition. Explicit instruction in strategic reading can empower learners to become autonomous, confident, and critical readers.

Future research should involve larger samples, multiple institutional contexts, and intervention-based designs to examine the long-term impact of metacognitive strategy training. Despite its limitations, the present study contributes valuable insights into ESL reading processes in Indian higher education and supports the integration of metacognitive pedagogy as a core component of undergraduate English curricula.

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