

Metacognitive Awareness to Learning and Reading Success of College Students

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Abstract

This study was conducted to examine the relationship between metacognitive awareness to learning and reading success of the college students at a state university during the second semester academic year 2024-2025. Specifically, the study aimed to determine the level of students' metacognitive awareness to learning, assess their level of reading success, and explore connection between the variables. A total of 287 students were randomly selected from a population of 1,130 college students. To gather the necessary data, the researcher utilized two instruments. The first was a 30-item adopted questionnaire developed by Kouider Mokhtari and Carla Reichard (2002) designed to measure metacognitive awareness to learning. The second was a 28-item adapted and modified reading comprehension test, aimed at evaluating students' reading success. The findings of the study revealed that the college students exhibited a high level of metacognitive awareness to learning. Likewise, the students demonstrated a high level of reading success, suggesting that they possess foundational reading skills and are capable of sustaining comprehension and critical thinking. Moreover, the study found a weak but statistically significant positive correlation between metacognitive awareness to learning and reading success. This implies that while the relationship between the two variables is not strong, students with higher level of metacognitive awareness to learning tend to perform slightly better in reading-related tasks. As a result, the null hypothesis – stating that there is no significant relationship between metacognitive awareness to learning and reading success – was rejected.

Keywords: metacognitive awareness to learning, reading success, metacognition

Introduction

In the dynamic landscape of higher education, college students are expected to process and comprehend vast amounts of information across various disciplines. However, not all students succeed equally in their academic pursuits, particularly in reading – intensive tasks that require critical comprehension and reflective thinking. One emerging factor that significantly contributes to academic performance is metacognitive awareness to learning – the strategies or techniques that involve awareness and regulation of one's own cognitive processes during learning. Metacognition, often described as "thinking about thinking," plays a vital role in learning, especially in reading comprehension and study strategies.

The study was conducted to explore how metacognitive awareness to learning enhances the reading success of college students during the academic year 2024-2025. It aimed to examine the extent to which students' awareness of their own thinking process contributes to their reading performance and academic achievement.

Specifically, the study sought to determine three key aspects: first, the level of metacognitive awareness to learning of the college students; second, the level of their reading success; and third, whether a significant relationship exists between student's metacognitive awareness to learning and their reading success. The study was anchored on the hypothesis that there is no significant relationship exist between metacognitive awareness to learning and the reading success of college students.

Literature Review

Metacognition was introduced by an American psychologist, John H. Flavell in the early 1970's. Flavell claimed that metacognition refers to "the knowledge which one has about his own cognitive processes products" (Flavell, 1976). Metacognitive awareness to learning refer to strategies or techniques that involve awareness and regulation of one's own cognitive process during learning (Sarmishta Ghosh, 2024). Metacognition is an essential part of teaching and learning and the main driver for self-regulation. In the metacognition process, learners tap into their experiences to develop a plan, achieve a goal, select strategies, monitor progress, and reflect on what and how they learned. Metacognitive awareness contributes to higher-order thinking skills, allowing learners to become effective in their studies (Moos and Ringdal, 2019). There are studies that shows that metacognitive awareness enhances overall academic performance. Those students who engage in self-regulation and reflective learning develop deeper understanding and problem-solving skills (Zimmerman and Schunk, 2018).

Reading success is not solely dependent on linguistic skills such as decoding and fluency but also on the ability to apply metacognitive strategies which improve comprehension and retention of a student (Lasser, 2020). Research

has consistently shown that strong reading abilities are closely linked to academic achievement and cognitive development (Snow, 2020). When students become proficient readers, they do more than just decode words; they develop comprehension, critical thinking, and the ability to engage deeply with complex text (Duke and Pearson, 2018). Beyond academics, reading proficiency also plays a vital role in emotional and social growth, helping individuals build empathy and improve communication skills (Guthrie and Wigfield, 2021). The benefits of reading success extend far beyond the classroom. In the professional world, strong reading skills empower individuals to navigate workplace demands, analyze information effectively, and continue learning throughout their careers (Kirsch et al., 2019).

Methodology

This study used a survey-correlational method to examine the relationship between metacognitive awareness and reading success of college students. A total of 287 participants were selected through stratified random sampling from the 1,130 students enrolled in a state university for the academic year 2024–2025. The sample distribution included: BSA – 185, BSF – 55, BSFT – 42, and BSHT – 5. Participants were selected proportionally using Raosoft's formula and a lot-drawing method.

To measure metacognitive awareness, the study used the Metacognitive Awareness of Reading Strategies Inventory (MARSI) by Mokhtari and Reichard (2002), which includes Global Reading Strategies (GRS), Problem-Solving Strategies (PSS), and Support Reading Strategies (SRS). An adapted reading comprehension test was administered to evaluate students' reading success, focusing on literal, inferential, analytical, and vocabulary comprehension using literary and informational texts.

Data analysis techniques included frequency count and percentage to describe participants' profiles, mean to determine levels of metacognitive awareness to learning and reading success, and Pearson r at a 0.05 significance level to analyze the relationship between the two variables.

Results

The results indicate that students' metacognitive awareness to learning level is high ($mean = 3.93$, $SD = 0.46$), suggesting that they possess strong self-regulation skills in their learning processes. This means that college students are highly capable of planning their study strategies, monitoring their understanding, and evaluating their comprehension to improve learning outcomes. Their ability to reflect on their thinking processes allows them to make necessary adjustments in their study habits, which can lead to better academic performance.

The standard deviation ($SD = 4.50$) indicates considerable variability in students' reading success levels. The findings indicate that college students' reading success level is high ($mean = 20.03$, $SD = 4.50$). This suggests that while students possess fundamental reading skills, they may still require additional support in higher-order comprehension, critical thinking, and reading fluency to effectively engage with complex academic texts.

The results indicate a weak but statistically significant positive correlation between metacognitive awareness to learning and reading success ($r = 0.129$, $p = 0.029$). Since the p -value is less than 0.05, the null hypothesis, which states that there is no significant relationship between the two variables, is rejected. This suggests that as metacognitive awareness to learning increases, there is a slight improvement in reading success among college students.

Discussion

The results indicate that students' metacognitive awareness to learning level is high. A high level of metacognitive awareness to learning implies that students are actively engaged in strategic learning, meaning they set goals, assess their progress, and modify their strategies when needed. This is particularly significant in higher education, where students must manage complex texts and academic tasks independently. When learners consistently regulate their cognitive processes, they become more efficient in understanding, retaining, and applying information across different subjects. Several factors may contribute to the high level of metacognitive awareness to learning among college students. Prior academic exposure to reflective learning techniques, supportive learning environments, access to digital and print resources, and instructional strategies that promote critical thinking likely play key roles in strengthening their metacognitive abilities. Additionally, motivation and self-discipline are crucial, as students who are more engaged in their learning tend to apply metacognitive strategies more effectively.

The findings indicate that college students' reading success level is high. This suggests that while students possess fundamental reading skills, they may still require additional support in higher-order comprehension, critical thinking, and reading fluency to effectively engage with complex academic texts. Cognitive processes such as decoding, vocabulary acquisition, and metacognitive awareness play a crucial role in shaping reading success, as they contribute to overall academic performance. According to Paris and Jacobs (2022), reading success is influenced by cognitive

processes such as decoding, vocabulary acquisition, and metacognitive awareness, all of which contribute to overall academic performance. The standard deviation ($SD = 4.50$) suggests considerable variability in students' reading success levels, indicating that while some students demonstrate strong comprehension skills, others struggle with processing and analyzing texts. This variation may stem from differences in prior reading experiences, instructional methods, language proficiency, and engagement with academic reading materials. Students with lower reading success often face difficulties in text interpretation and inferential reasoning, which can hinder their ability to comprehend and synthesize information in content-heavy courses.

The results indicate a weak but statistically significant positive correlation between metacognitive awareness to learning and reading success. Although the correlation is weak, it highlights the potential role of metacognitive skills in enhancing students' reading abilities. Self-regulation strategies, such as planning, monitoring comprehension, and evaluating reading performance, may contribute to better text understanding and retention. However, the modest correlation implies that other factors, such as vocabulary knowledge, prior reading experience, and cognitive abilities, may also significantly impact reading success.

The findings underscore the importance of integrating metacognitive strategies into reading instruction to strengthen students' comprehension skills. Educational interventions, such as explicit metacognitive training, reflective reading exercises, and guided self-questioning techniques, could help students develop better awareness of their thought processes while reading. Encouraging students to set reading goals, track their comprehension, and adjust strategies accordingly may further enhance their ability to process complex texts.

Conclusion

This study provided valuable insights into the relationship between metacognitive awareness to learning and reading success of college students of a state university. The findings demonstrated a statistically significant positive correlation between students' metacognitive awareness and their performance in reading comprehension. Specifically, learners who exhibited a heightened ability to monitor, evaluate, and regulate their cognitive processes while engaging with texts achieved notably higher comprehension scores. This correlation underscores the critical role that metacognitive awareness to learning play in fostering academic achievement, particularly in disciplines that require complex reading and critical analysis. The results affirm that cultivating metacognitive skills—such as planning, self-monitoring, and adaptive reading techniques—can significantly enhance students' ability to process and understand academic material, ultimately contributing to more effective and independent learning.

Based on the findings and conclusions of this study, several key recommendations are proposed to strengthen students' reading comprehension through the enhancement of metacognitive awareness. These suggestions are directed toward students, teachers, school administrators, parents, and future researchers to foster a collaborative effort in addressing literacy challenges and promoting academic success.

First and foremost, students are encouraged to actively develop and apply metacognitive strategies such as self-questioning, summarizing, and reflective thinking. These practices can significantly improve reading comprehension and overall academic performance. Engaging in active reading habits—such as annotating texts, setting reading goals, and pausing to reflect—can also enhance critical thinking and information retention. Moreover, students should be motivated to seek academic support through reading programs, peer study groups, or tutoring sessions to reinforce their skills and confidence in reading.

For English teachers, it is recommended that metacognitive instruction be systematically incorporated into reading activities. This includes explicitly teaching students how to plan, monitor, and evaluate their reading strategies. Designing lessons that include structured reading comprehension techniques not only supports learners in developing independence but also promotes lifelong reading habits. Additionally, teachers are encouraged to employ differentiated instruction to address the diverse reading levels and learning styles within their classrooms, ensuring that all students receive the guidance and support they need.

School administrators also play a crucial role in promoting literacy development. It is recommended that professional development programs be provided to equip teachers with the knowledge and tools necessary to effectively integrate metacognitive awareness into their instruction. Implementing school-wide literacy initiatives that foster a culture of reading and metacognitive engagement is essential. Furthermore, allocating resources such as diverse reading materials, access to tutoring services, and regular reading workshops can significantly support struggling readers and enhance the overall academic environment.

Parents are also vital partners in the learning process. They are encouraged to support their children's reading development by fostering independent reading habits at home. Providing access to a wide range of reading materials, discussing books, asking comprehension questions, and modeling effective reading behaviors are all strategies that can reinforce classroom learning. Collaborative efforts between parents and teachers can ensure consistent support and alignment of strategies that nurture reading success.

Finally, future researchers are encouraged to broaden the scope of investigation by examining other cognitive and environmental factors that influence reading success. Areas such as student motivation, socioeconomic status, and digital literacy warrant further exploration. Longitudinal studies on the lasting impact of metacognitive awareness to learning on reading and academic performance could provide deeper insights. Additionally, evaluating the effectiveness of intervention programs that incorporate metacognitive instruction across various educational contexts could contribute valuable information to the field of literacy education.

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