METACOGNITIVE READING SKILLS OF HIGH SCHOOL LEARNERS IN ENGLISH: BASIS FOR INTERVENTION

ROMALYN P. BAYONA
ORCID No. 0009-0002-5075-3839
Romalynbayona24@gmail.com
Pangasinan State University
Infanta, Pangasinan

===

Abstract: *This study investigated the metacognitive reading skills of high school learners of the Pangasinan State University High School Infanta Campus (PSU HS IC) for the First Grading of the Academic Year 2023 – 2024. The study aimed to propose an intervention plan for reading comprehension to attain learning delivery in English subjects successfully. The study used a mixed-method approach, using a descriptive-correlational-experimental research design and a structured research instrument. Data were presented using the appropriate statistical tools, such as frequency count, percentage, ranking, mean, one-way ANOVA, and Spearman's rho. Research instrumentation underwent both validity and reliability tests and achieved internal consistency with a Cronbach's alpha of 0.107 or a 92% retrieval rate. Initial findings revealed that among high school learners, there were significant differences between Reading Fluency and Gender, as well as between Cognitive Skills and Reading Fluency in terms of Academic Performance. High school learners had a minimum of 18 sources of reading materials and 29 metacognitive reading strategies in their entire course of study. The Focus Group Discussion (FGD) revealed that 16% of learners were frustrated, 27% were slow learners, and 15% were struggling learners. Their academic performance in the First Grading of the Academic Year 2023–2024 was 84, indicating a metacognition result in the concerned school. Further, the learners revealed the top concerns whether on the achievement or non-achievement of the desired metacognition in primary education, such as learners afraid to be corrected, especially when in public (N=40) where concerned teachers may initiative constructive feedback mechanism, hard to cope up English or unfamiliar words (N=34) where concerned teachers may give or require learners to submit 'Word for the Day,' and wrong connotation (mindset) that English subject is a difficult or challenging one (N=33) where concerned teachers may induce motivation (Games, Participation, Collaboration) in the entire classroom engagement. In light of the presented claims and arguments, the study humbly recommends sustainable instructional materials (IMs), the establishment of a Learning Resource Center (LRC), and differentiated instruction when handling and teaching English subjects.*

Keywords: *English Subject, Metacognition, Correlational, Global Strategies, Problem-solving Strategies, Support Strategies, Spearman's rho*

===

INTRODUCTION

The foundational work by Thorndike et al. (1968) demonstrated that teacher expectations regarding student potential significantly impacted student performance. Their experiment illustrated that when teachers were led to believe that certain students would show significant academic growth, these students indeed performed better, reinforcing the idea that expectations can manifest as self-fulfilling prophecies. Consequently, if the teacher expects enhanced reading performance from the learners, the learners will show that enhancement. In the context of reading as a skill, it has served human development by continuing to enhance learning capacities. However, this can only be achieved through a genuine interest in reading, which becomes a source of happiness or an outlet for stress. Hence, it becomes a requirement that when someone reads, they should learn from it. Reading requires comprehension, and the ultimate objective is to improve one's life. Researcher Karlin opined that reading programs mean word recognition, word meaning, understanding, study, and appreciation skills.

Consequently, this study aims to determine the metacognitive level of high school learners, providing a strong foundation for understanding the prevailing conditions of reading comprehension skills. This will enable the development of an intervention plan, instructional materials, and a process review, among other outcomes.

Metacognition has become an exciting topic in the academic community. It welcomes the idea of a person's reading ability but demands comprehension. As we read, we employ metacognitive skills

CC The Journal *is a multidisciplinary, peer-reviewed, scientific, online, indexed, and cross-referenced journal aimed to publish research findings of students, faculty, financial/economic, technical, and institutional studies.*

1

and strategies to guide our understanding. Martin et al. (2021) cited metacognition as "thinking about thinking," involving knowledge about his thinking processes and products, active monitoring, and regulation of cognitive processing activities. Metacognition, as applied in the academic community, has three (3) aspects: 1) metacognitive knowledge, 2) metacognitive monitoring and self-regulation, and 3) control. However, failures were noted in its successful attainment. Research by (Mustopa et al., 2020) advocates for the incorporation of lifelong learning principles into teacher training programs. By embedding metacognitive training within these programs, future educators can gain the necessary tools and competencies to encourage self-regulation and independent learning among their students. It offers creative thinking opportunities that enable learners to harness their potential, push their limits, and adapt to new situations. Rastegar et al. (2017) further explored the relationship between metacognitive reading strategies and reading comprehension achievement among English as a Foreign Language (EFL) learners.

Despite claims and arguments about the role of metacognition in education, many researchers still believe that it contributes to a holistic approach to learners' individualities.

Cognizant of the many goals of Basic Education to insistently provide quality education at the grassroots level, the study must be pursued to determine the metacognition level in one high school in the Municipality of Infanta, Pangasinan. The Pangasinan State University High School Infanta Campus offers Junior and Senior high school programs that envision learners becoming achievers today and leaders of tomorrow.

FRAMEWORK

The theoretical basis of the study on the metacognitive reading skills of high school learners in English may include the following:

Metacognition: This theory posits that individuals can monitor and regulate their thinking processes. Metacognitive reading skills refer to the ability to reflect on one's reading processes, such as identifying the purpose of reading, activating prior knowledge, monitoring comprehension, and adjusting reading strategies accordingly.

Cognitive Load Theory: This theory posits that individuals have a limited capacity for processing information. Metacognitive reading skills may help learners manage their cognitive load by selecting and applying appropriate reading strategies.

Schema Theory posits that individuals use prior knowledge and experiences to interpret and make sense of new information. Metacognitive reading skills help learners activate their previous knowledge and connect it to the text, thereby enhancing comprehension.

Social Cognitive Theory posits that individuals learn through observation, imitation, and modelling. Metacognitive reading skills may develop through explicit instruction, modelling, and feedback from teachers and peers.

Reading Comprehension: This theory posits that reading comprehension is a complex process involving cognitive, metacognitive, and socio-affective factors. Metacognitive reading skills may play a crucial role in enhancing reading comprehension.

Overall, the theoretical bases of the study suggest that metacognitive reading skills are essential for enhancing reading comprehension and managing cognitive load. The study aims to investigate the metacognitive reading skills of high school learners in English subjects and to identify effective interventions to enhance these skills. The study may contribute to developing evidence-based practices for improving reading comprehension and academic achievement among high school learners in English subjects.

OBJECTIVES OF THE STUDY

This study investigated the metacognitive reading skills of high school learners of the Pangasinan State University High School Infanta Campus (PSU HS IC) for the First Grading of the Academic Year 2023 – 2024. The study aimed to propose an intervention plan in reading comprehension for the successful attainment of learning delivery in English subjects.

METHODOLOGY

Research Design

The study employed a mixed-method approach, combining a descriptive-correlational-experimental research design, a Focus Group Discussion (FGD), and a structured research instrument.

Its primary objective was to investigate the prevailing conditions of metacognition in one high school in the Municipality of Infanta, Pangasinan, to develop an intervention plan to achieve the set learning expectations in reading comprehension among high school learners.

A descriptive research design was used to describe and understand the existing conditions of metacognition among high school learners, i.e., Grade 7, Grade 8, Grade 9, Grade 10, Grade 11, and Grade 12. Further, the Focus Group Discussion also identified those who were slow, frustrated, and struggling in basic education.

The correlational research design was used to establish the relationship of test question types (Easy, Average, Difficult, Critical) to the academic performance of identified learners (slow, frustrated, struggling). It tried to establish a significant relationship between developed and enhanced Instructional Materials (IMs) used in the actual test administration.

An experimental research design was used to administer test questions (developed and enhanced) using the pretest and posttest.

The research instrument underwent a reliability test before being used in the data gathering. A dry run was conducted to ensure an acceptable level of internal consistency in the instrument, anticipating any necessary modifications to suit its purpose.

Research Site

The study focused on the Junior and Senior High School Departments of the Pangasinan State University High School Infanta Campus (PSU HS IC) for the First Grading of the Academic Year 2023 – 2024. It is located in Brgy. Bamban, Infanta, Pangasinan.

Participants

The researcher retrieved enrollment data from the Department of Education - Learner's Information System (DepEd – LIS).

Based on the record retrieved from the DepEd–LIS and attested by the Office of the School Principal, there were 19 learners enrolled in Grade 7, 30 learners enrolled in Grade 8, 22 learners enrolled in Grade 9, 19 learners enrolled in Grade 10, 26 learners enrolled in Grade 11, and 30 learners enrolled in Grade 12.

The total population comprised 146 high school learners, divided into 90 (62%) for Junior high school and 56 (38%) for Senior high school.

Further, from the total population of 146, the 30 Grade 12 learners were excluded from the statistics because they did not have English subjects for the period. The sample size comprised 116 high school learners (146-30).

Further, the study had a 107/116 or 92% retrieval rate based on convenience sampling.

CC The Journal *is a multidisciplinary, peer-reviewed, scientific, online, indexed, and cross-referenced journal aimed to publish research findings of students, faculty, financial/economic, technical, and institutional studies.*

3

Instrumentation

A descriptive research design was used to describe and understand the existing conditions of metacognition among high school learners, i.e., Grade 7, Grade 8, Grade 9, Grade 10, Grade 11, and Grade 12. Further, the Focus Group Discussion also identified those who were slow, frustrated, and struggling with basic education.

The correlational research design was used to establish the relationship of test question types (Easy, Average, Difficult, Critical) to the academic performance of identified learners (slow, frustrated, struggling). It tried to establish a significant relationship between developed and enhanced Instructional Materials (IMs) used in the actual test administration.

An experimental research design was used to administer test questions (developed and enhanced) using the pretest and posttest.

The research instrument underwent a reliability test before being used in the data gathering. A dry run was conducted to ensure an acceptable level of internal consistency in the instrument, with the anticipation of any necessary modifications to suit its purpose.

Data Collection

The study prepared a series of letter requests for concerned offices, such as the School Administrators of PSU HS IC, to retrieve enrolment data comprising the total sampling.

A letter request was handed down to the School administrators of SJI, Inc. for the conduct of a dry run to 30 respondents.

In the actual data gathering, a separate letter request was made to the respondents, as well as the concerned parents, guardians, and subject teachers.

The instrument was briefly discussed with the respondents (pilot/float) to clarify any points and ensure they fully understood the contents, processes, and purposes of data gathering.

Another letter request was prepared for the interview with Key Interview Informants (KIIs).

In the actual data gathering, the learners received a series of test instructions from the researcher on objectively handling the English metacognition questionnaires on a per-grade level during their vacant time, tapping their classroom schedules.

RESULTS AND DISCUSSION

In summary, 17% (16) identified as frustrated learners, 29% (27) as slow learners, and 16% (15) as struggling learners. The problematic learners observed in all grade levels were 62 or 58% of the total sampling.

Data on problematic learners were confirmed after a review of learners' academic performance validation through a Focus Group Discussion (FGD) with school Key Informants (English teachers, Grade 7 Adviser, Grade 8 Adviser, Grade 9 Adviser, Grade 10 Adviser, Grade 11 Adviser, and Concerned School Administrators), and actual observation of learners' performance.

Table 12
Profile of the Respondents in terms of Reading Identification

CC The Journal is a multidisciplinary, peer-reviewed, scientific, online, indexed, and cross-referenced journal aimed to publish research findings of students, faculty, financial/economic, technical, and institutional studies.

4

Grade Level	Frustration		Slow		Struggling		Total		
	N	%	N	%	N	%	N		%
7	2	11	4	21	1	5	7		37
8	9	30	6	20	8	27	23		77
9	1	6	6	33	44 4	22	11		61
10	1	6	8	23	1	6	10	11	56
11	4	18	5		2	9			50
Total	17	16	29	27	16	15	62		58

Table 66 summarises the significant differences in metacognitive strategies among high school learners.

The computed F 0.30 was less than the F critical value of 3.03. The P-value was 0.74, which was more significant than alpha 0.05.

This meant no significant difference existed between and among the three (3) metacognitive strategies. Further, this indicated that the high school learners had the same metacognitive strategies.

Table 66

Significant Difference Between Global Strategies, Problem-solving Strategies, and Support Strategies Among the High School Learners

ANOVA: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
GS	98	369.94	3.774898	0.291895		
PSS	98	375.43	3.830918	0.287829		
SRS	98	374.70	3.823469	0.323355		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.181397	2	0.090698	0.30	0.74	3.03
Within Groups	87.59869	291	0.301026			
Total	87.78008	293				

CONCLUSION

The following conclusions were crafted based on the study's findings, results, and discussions. The use of the following profile indicators, such as age, Gender, academic performance, reading materials, reading strategies, and reading identification, may or may not contribute to the significant difference in metacognition among high school learners.

For Grade 7, all profile indicators showed no significant difference between cognitive skills, reading fluency, and reading comprehension regarding age, Gender, academic performance, reading materials, and reading strategies.

The considerable profile indicators in the successful attainment of metacognition among high schools were Gender to reading fluency (Grade 8), academics to cognitive skills, and reading fluency (Grade 8). Gender became significant for the cognitive skills and reading fluency of Grade 9. The

cognitive skills and reading comprehension were substantial to the Gender and academic performance of Grade 10. There was a considerable difference in reading fluency in relation to the academic performance of Grade 11.

At the time of this study, high school learners had access to at least 18 sources of reading materials throughout their entire course of study.

At the time of this study, high school learners had at least 29 metacognitive reading strategies in their entire course of study.

The academic performance of high school learners for the First Grading of the Academic Year 2023 – 2024 was 84.43, which mirrors the metacognitive level in the concerned school.

TRANSLATIONAL RESEARCH

Translational research on the metacognitive reading abilities of high school English language learners provides a solid basis for creating efficient treatments to help students enhance their reading comprehension. This research aims to improve students' reading skills by converting theoretical understanding of metacognitive reading skills into beneficial therapies and methods used in classroom settings.

The first step in conducting translational research on this subject is to identify the specific metacognitive reading skills that high school students may struggle with, such as self-regulating their comprehension of the text, monitoring comprehension, setting reading goals, and employing efficient reading strategies. Based on these identified skills, researchers can create interventions to meet the individual requirements of the pupils.

Based on the results of translational research, interventions could involve giving students explicit instruction on metacognitive reading strategies, giving them chances to practice and apply these strategies in reading assignments, and providing them with feedback and support so they can gradually improve their metacognitive abilities. Teachers can assist students in becoming more engaged and strategic readers by incorporating these interventions into their lesson plans. This will increase students' reading comprehension and academic achievement.

Translational research on high school English language learners' metacognitive reading abilities provides a crucial foundation for creating evidence-based treatments to help children become proficient readers. Teachers can better meet the needs of their students and help them succeed in reading and learning by bridging the gap between research and practice.

LITERATURE CITED

Al-Kiyumi, O., Seyabi, F. A., & Hassan, A. H. (n.d.). An empirical study on the effect of instruction on metacognitive strategies on EFL reading comprehension: the case of Foundation-Level students in Oman. https://eric.ed.gov/?q=metacognitive+strategies&pg=2&id=EJ1309399

Bozgun, K., & Can, F. (n.d.). The Associations between Metacognitive Reading Strategies and Critical Reading Self-Efficacy: Mediation of Reading Motivation. https://eric.ed.gov/?q=metacognitive+strategies&pg=3&id=EJ1379056

Cognition, metacognition, and reading. (n.d.). Google Books. https://books.google.com.ph/books?hl=tl&lr=&id=KHHjBwAAQBAJ&oi=fnd&pg=PA1&dq=metacognition+in+reading&ots=VO6pahf39A&sig=GczszPCPVTbpavRiKsQcbavSDuU&redir_esc=y#v=onepage&q=metacognition%20in%20reading&f=false

CC The Journal *is a multidisciplinary, peer-reviewed, scientific, online, indexed, and cross-referenced journal aimed to publish research findings of students, faculty, financial/economic, technical, and institutional studies.*

6

Lu, P., Schroeder, S., Burris, S., Rayfield, J., & Baker, M. (n.d.). The Effectiveness of a Metacognitive Strategy during the Reading Process on Cognitive Allocation and Subject Matter Retention.

Martin, Narciso Jr. A., Ventayen, Randy Joy M., and Retuerne, Ricky D. (2021). Metacognition in The Senior High School in One National High School in The Philippines. TESOL International Journal, Vol.6, Issue 4.4. Publishing Brisbane Australia.

Mustopa, N. M., Mustofa, R. F., & Diella, D. (2020). The relationship between self-regulated learning and learning motivation with metacognitive skills in biology subject. JPBI (Jurnal Pendidikan Biologi Indonesia), 6(3), 355. https://doi.org/10.22219/jpbi.v6i3.12726

Rastegar, M., Kermani, E. M., & Khabir, M. (2017). The relationship between metacognitive reading strategies use and reading comprehension achievement of efl learners. Open Journal of Modern Linguistics, 07(02), 65-74. https://doi.org/10.4236/ojml.2017.72006

Thorndike, R. L., Rosenthal, R., & Jacobson, L. (1968). Pygmalion in the classroom. American Educational Research Journal, 5(4), 708. https://doi.org/10.2307/1162010

CC The Journal *is a multidisciplinary, peer-reviewed, scientific, online, indexed, and cross-referenced journal aimed to publish research findings of students, faculty, financial/economic, technical, and institutional studies.*

7