

Explanatory Sequential Mixed Methods Study of SQ3R: A Theory

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ABSTRACT

This study investigated the effectiveness of the SQ3R method in improving students' reading comprehension and explored both student and teacher perceptions of its use. Using an explanatory sequential mixed-method design (Quan-qual), the quantitative phase employed a quasi-experimental one-group pretest-posttest design with 20 purposively selected third-year Bachelor of Elementary Education students at Palompon Institute of Technology (AY 2019–2020), followed by qualitative interviews. Findings revealed that students' reading comprehension in literal, inferential, and evaluative aspects improved, with a significant difference observed after the SQ3R intervention. The qualitative phase, analyzed through the Classical Glasserian Grounded Approach, confirmed positive perceptions of the strategy and led to the formulation of the theory: "SQ3R as a Strategy Instruction to Improve Learning Process."

INTRODUCTION

In today's modern world, students must develop the ability to learn effectively through reading and to actively participate in an educated society. A skilled reader has the potential to enlighten others, yet comprehension skills cannot be cultivated without proper guidance from teachers. The growth of comprehension is strongly tied to what Taba, as cited in Asiri (2017), described as "cognitive commerce."

Rahmawati (2013) explained that the SQ3R strategy is a structured approach to reading comprehension, designed to help students engage with textbooks and academic tasks across various learning contexts. This method fosters an active and thoughtful attitude toward learning, enhancing the cognitive processes that contribute to academic success. Developed by Robinson in the early 1940s (as cited in Rahmawati, 2013), SQ3R stands for Survey, Question, Read, Recite, and Review.

To strengthen students' reading proficiency, the researcher applied the SQ3R method, which guides learners through a systematic process: Survey, Question, Read, Recall, and Review. Widely regarded as an effective reading strategy, SQ3R mirrors the habits of proficient readers while offering struggling learners' practical models to follow. According to Hutasuht (2009), it not only improves reading skills but also makes the reading process less challenging and more engaging.

Furthermore, Artis (2008) highlighted the value of SQ3R, noting that it enables students to independently grasp course fundamentals through reading, thereby reducing reliance on traditional teacher lectures. He argued that this approach encourages active student participation and helps change learners' negative perceptions of reading textbooks.

Recognizing the importance of effective classroom learning management, the researcher sought to determine the effectiveness of SQ3R in enhancing students' reading comprehension across different disciplines. With this goal in mind, the study was undertaken.

LITERATURE REVIEW

Reading comprehension is a fundamental academic skill that demands the use of strategies to progress from basic understanding to deeper inferential and evaluative thinking (Grabe, 2009; Rumelhart, 1980). The SQ3R technique—Survey, Question, Read, Recite, and Review—provides a systematic approach that encourages active engagement, better retention, and critical analysis of texts (Huber, 2004; Helmut, 2013). Research has consistently shown its effectiveness in enhancing comprehension among diverse learners (Asiri, 2017; Rahmawati, 2013; Lia, 2016), while also alleviating reading anxiety and promoting learner independence (Rajab et al., 2012). Nevertheless, obstacles such as limited time and students' reluctance to follow structured routines remain (Bulut, 2017; Yuliana, 2013). By applying an explanatory sequential mixed methods design, researchers can first assess the quantitative impact of SQ3R and then examine students' qualitative experiences, leading to a grounded theory of its role in comprehension. This holistic perspective elevates SQ3R from a mere strategy to a theoretically informed framework for improving reading and learning.

METHODOLOGY

This study employed an explanatory sequential mixed methods design (Creswell & Plano Clark, 2011), beginning with the collection of quantitative data, followed by a qualitative phase. For the qualitative component, the researcher applied the Glaserian approach to Grounded Theory to construct a theoretical explanation of how students enhance their reading comprehension skills.

During the mixed methods analysis, both quantitative and qualitative results were examined to provide deeper insights. The researcher utilized constant comparative analysis, as proposed by Gilstrap (2013) and Creswell (2013), to interpret and integrate findings. This phase aimed to clarify the reasoning behind the relationships identified in the quantitative stage and to enrich them with qualitative perspectives.

The study was conducted at Palompon Institute of Technology, Evangelista Street, Palompon, Leyte. Data collection took place in Room 4 of the College of Maritime Education building, a learning environment that is well-structured, properly ventilated, and conducive to academic activities.

The participants consisted of twenty (20) third-year Bachelor of Elementary Education (BEED) students from the College of Teacher Education, officially enrolled in the course *Developmental Reading* during the second semester of SY 2019–2020. Out of this group, ten (10) students were selected as a focus group for the qualitative phase. Additionally, the English instructor from the Language and Literature Department who handled the class was also included in the qualitative data collection.

To gather data, a reading comprehension test titled *Comprehensive Assessment of Reading Comprehension Strategies* (see Appendix A) was administered as both a pretest and posttest. Students completed five pretest activities, using CHED-based reading materials aligned with the *Developmental Reading* curriculum.

The intervention phase included five reading activities drawn from the same CHED-based book, each consisting of one passage accompanied by twelve multiple-choice questions, totaling sixty (60) items. These questions were categorized into three comprehension levels: Literal (20 items), Inferential (25 items), and Evaluative (15 items).

The students' mean scores were then interpreted through a qualitative description of reading comprehension levels using a score-range scale. For the qualitative phase, an in-depth interview guide was employed, consisting of two sections: Part A on demographic information, and Part B featuring open-ended, semi-structured questions designed to capture participants' experiences and perspectives.

The procedure was carried out in two phases for quantitative and qualitative data collection

During the quantitative data collection phase, the process was carried out in three (3) stages: (1) pre-intervention, (2) intervention, and (3) post-intervention.

Pre-intervention. On the first day of the study, students were provided with a test adapted from the Developmental Book Reading Comprehension Test, which

served as their pre-test. They were instructed to complete the test within one hour, and all answer sheets were strictly collected immediately after the allotted time to ensure compliance with the instructions.

The subject teacher checked the answer sheets, after which the researcher computed the students' average scores. These scores were considered as baseline indicators of the students' initial reading comprehension levels.

Intervention. After administering the pretest, the teacher gave a series of reading activities to the SQ3R group.

Five (5) reading activities adapted from Yuliana (2013) were administered to the SQ3R groups, with the strategy applied throughout the sessions. The intervention began when students started reading the texts. On the first day, the teacher introduced the concept of strategic SQ3R reading, modeled its application, and guided the students through the process. After completing the reading task, feedback was provided, and the class proceeded to the next material. Each intervention lasted one hour and thirty minutes. In the following sessions, the teacher no longer re-explained the SQ3R procedure since it had already been introduced, and the same process was followed until the end of the experimental phase.

After the intervention, students were given a post-test using the same reading comprehension test that had been administered as a pre-test. They were allotted one hour to complete it, and the subject teacher checked the results. The average post-test scores were used to measure students' reading comprehension progress.

To complement the quantitative phase, the researcher conducted semi-structured interviews with ten (10) students who had also participated in the test. These students were chosen based on their excellent post-test performance. Participants were briefed about the purpose of the study, and informed consent was obtained, including permission to use audio recordings for accuracy. Based on initial responses, the researcher refined and adjusted the interview guide. In-depth interviews were then carried out to validate the accuracy and reliability of the participants' responses. Data gathered through interviews and questionnaires were organized, tabulated, and prepared for analysis.

Grounded theory was applied to guide the qualitative analysis. Unlike traditional research that begins with a hypothesis, grounded theory starts with data collection through various methods. Key points from the collected data were coded, grouped into concepts, and further developed into categories or themes, which became the foundation for theory construction. The researcher immersed himself in the transcribed interviews by listening to the audio recordings multiple times before transcription, ensuring a deeper understanding of participants' intended meanings. Initial coding was carried out line by line, identifying concepts relevant to information-sharing dynamics. Similar concepts were clustered, while unique ones were maintained for further exploration. Categories and themes emerged through constant comparison, integration, and modification.

Guided by emerging categories, theoretical sampling was employed to refine data collection. Interviews were continuously shaped by concepts and

subcategories identified in earlier stages. As new data emerged, categories were compared, integrated, or contrasted to strengthen the validity of the findings. Constant comparative analysis was the core strategy in both coding and analysis. Its purpose was to refine concepts, test emerging hypotheses, and generate accurate descriptions of the data. Data collection, coding, and theoretical sampling occurred simultaneously to ensure the resulting theory was firmly grounded in evidence.

Throughout the process, the researcher engaged in memo writing to document reflections, emerging connections, and analytical insights. These memos captured relationships between concepts, codes, and categories, as well as the researcher's own observations and reasoning. They served as a critical reference for theoretical sampling, refinement of interview questions, integration of subcategories, and development of theoretical categories. Memos were instrumental in synthesizing data, guiding theoretical sampling, and validating categories. They contributed significantly to the identification of the core category and the eventual development of a grounded theory on students' reading comprehension processes.

Thematic analysis was applied in the qualitative phase of the study. It is a method used to identify, analyze, and report patterns or themes within the data. This approach provides an organized and detailed description of the dataset, while also allowing for the interpretation of different aspects of the research topic (Boyatzis, 1998). The range of approaches in conducting thematic analysis may vary, depending on the methodological decisions made by the researcher.

For the quantitative scoring of students' reading comprehension, a range-based formula was employed. The maximum possible score was set at 60, while the minimum score was 0.

Table 1. Formula of getting the range of scores

SQ3R	Number of Test Items	Initial	Interpretation	Final	Interpretation
<u>Literal</u>					
<u>Meaning</u>		14.00			
Mean	15	1.30	Very Good	14.6	Very Good
SD				0.51	
<u>Inferential</u>					
<u>Meaning</u>		17.7		23.4	
Mean	20	3.88	Good	1.88	Very Good
SD					
<u>Evaluative</u>					
<u>Meaning</u>		15.6		19.25	
Mean	25	3.54	Good	0.79	Very Good
SD					
<u>Overall</u>					
Mean	60	47.3	Very Good	52.25	Very Good
SD		2.58		1.45	

The frequency distribution of the students' reading comprehension ability scores will be categorized into five levels: excellent, very good, good, fair, and poor. The distribution will be calculated based on the Mi score and SDi. The mean was used to determine the students' initial and final reading comprehension test

and standard deviation will be used to determine how dispersed the distribution has been.

To test if there was a significant difference between the pretest and the posttest scores of each group, the t-test for dependent correlated samples will be used. To determine if there is a significant mean difference in the reading comprehension test of the two groups, the t-test for independent samples and the level of significance will be tested using $\alpha = 0.05$.

RESEARCH RESULT AND DISCUSSION

Initial and Final Reading Comprehension Level

The first research problem examined the initial and final reading comprehension levels of students exposed to the SQ3R reading strategy in terms of Literal Meaning, Inferential Meaning, and Evaluative Meaning.

As presented in Table 1, the initial mean score for Literal Meaning was 14 with a standard deviation of 1.30, while Inferential Meaning obtained a mean of 17.7 with a standard deviation of 3.88. For Evaluative Meaning, the mean score was 15.6 with a standard deviation of 3.55. The overall mean score was 47.3 with a standard deviation of 2.58.

These results indicate that students demonstrated a very good level of performance in Literal Meaning prior to the intervention, while both Inferential and Evaluative Meanings were at a good level. The overall performance was also rated very good. This suggests that students had relatively similar levels of reading comprehension before the treatment. Such uniformity is essential in experimental studies to ensure that participants possess comparable characteristics, thereby allowing for more valid and reliable results.

Initial and Final Reading Comprehension Levels of the Students in terms of; Literal Meaning, Inferential Meaning and Evaluative meaning

The final mean score of students exposed to SQ3R in literal meaning was 14.6, with a standard deviation of 0.51, interpreted as very good. This indicates that most respondents had successfully attained the literal level of reading comprehension. Achieving this level suggests that students were able to meet the required average percentage. Therefore, emphasis should be placed on teaching literal comprehension skills. Guzman et al. (1976) emphasized that a reader often fails to fully grasp a passage because personal assumptions interfere with the writer's intended meaning. Villamin (2001) similarly noted that many readers overlook details they consider unimportant, only realizing their significance when specific recall is required. Medes (SEAMEO, 2012), from the Bureau of Elementary Education, explained that although students at this level demonstrate basic knowledge and core understanding, they still require assistance in completing authentic tasks.

For inferential meaning, the students obtained a mean score of 23.4, with a standard deviation of 1.88, also interpreted as very good. This result indicates that while students initially struggled with inferential comprehension, their skills improved after the intervention. Developing inferential comprehension should remain a priority in teaching, particularly in areas such as predicting outcomes, interpreting context, and recognizing figurative language. May (1986, as cited in

Villamin, 2001) argued that without adequate knowledge and experience, readers cannot make proper inferences, and without inference, true comprehension does not occur. The inferential level requires recognizing relationships, utilizing prior knowledge, and interpreting language cues. Villamin (2001) warned that gaps in these areas often result in faulty inferences. Similarly, Medes (SEAMEO, 2012) observed that students at this level still struggle with foundational knowledge and skills essential for comprehension. In terms of evaluative meaning, students achieved a final mean score of 19.25, with a standard deviation of 0.79, likewise interpreted as very good. This finding suggests that students exposed to higher-level comprehension require deeper cognitive engagement. As Samples (1976, cited in Villamin, 2001) pointed out, creative reading—the highest level of comprehension—demands metaphorical thinking, which is often neglected in instruction. Thus, evaluative reading requires learners to move beyond literal facts toward critical judgment and interpretation.

Looking at the overall results, it is clear that students exposed to SQ3R demonstrated improved comprehension. The noticeable increase in scores, particularly in inferential comprehension, may be attributed to factors such as clear lesson discussions prior to the intervention and students' ability to effectively apply the SQ3R strategy in their reading tasks. The strategy proved impactful across multiple reading purposes, including general understanding, locating specific details, interpreting textual meaning, and identifying references. According to Medes (2012), students at this stage generally possess minimum knowledge and skills but still need support to perform authentic tasks effectively. Fan (2010) emphasized that comprehension strategies, such as SQ3R, significantly benefit EFL learners' reading comprehension. Palincsar and Brown (1984) viewed predicting as a monitoring strategy that enhances inference-making, while Pressley (2006) argued that prior knowledge is essential for generating the inferences needed to understand texts. Nuttall (1996) also stressed that activating prior knowledge improves implicit inferential comprehension. The SQ3R method further assisted students in building a mental framework into which new information could be integrated, establishing study goals, and strengthening memory through review. By applying this strategy, students were able to maximize the quality of their study time and significantly enhance their reading comprehension.

Overall, the results indicate that after the intervention, students' scores improved from fair to good. This demonstrates the effectiveness of SQ3R, confirming Rahmawati's (2013) findings that the strategy enhances comprehension and proficiency. The significant gains observed in students' reading comprehension before and after the intervention are presented in the following tables.

Mean gain in the Reading Comprehension levels of the students after the intervention

The final and most crucial research question focused on the mean gain in students' reading comprehension levels after the intervention. Table 3 illustrates

the difference between the initial and final mean scores of students exposed to the SQ3R strategy, as well as the statistical significance of this difference.

Table 2. Mean gain in the reading comprehension of the students after the intervention

SQ3R	Mean Gain	*t-value	p-value	Interpretation
Literal Meaning	0.6	-1.71	0.1036	Not Significant
Inferential Meaning	5.7	-7.93	0.0000002	Significant
Evaluative Meaning	3.65	-5	0.0001	Significant
Overall	9.95	17.21	.00001	Significant

0.05 Level of Significance N=20

The table indicates that the mean gain of students exposed to SQ3R was 9.95. The computed t-value of 17.21 exceeded the p-value of .00001 at the 0.05 level of significance, leading to the rejection of the null hypothesis. Consequently, the alternative hypothesis was accepted, confirming a significant difference in students' reading comprehension levels after exposure to SQ3R. This suggests, with 95% confidence, that the strategy had a substantial positive effect on their learning.

These findings are consistent with earlier studies. Bulut (2017) and Carlston (2008) both demonstrated that SQ3R improves students' understanding of the reading process and enhances comprehension. Baier (2011) likewise found that strategic reading through SQ3R positively influenced comprehension, recommending its recognition and adoption by educators, students, and parents alike. Parkes (2000) emphasized the importance of linking print, visuals, and audience in reading discussions, noting that students who practiced SQ3R attained higher comprehension scores. Similarly, Lia (2016) highlighted SQ3R as an effective method for thoroughly absorbing information, developing mental frameworks for learning, setting study goals, and improving retention through systematic review.

The strategy also played a vital role in motivating students. During the survey and question stages, it promoted engagement by encouraging learners to focus on essential ideas, anticipate content, and organize details effectively. Formulating questions based on the text fostered deeper interest and comprehension. This active involvement not only improved understanding but also optimized the use of classroom time.

Observations during the intervention further supported these outcomes. SQ3R fostered a lively and interactive learning environment in which students demonstrated heightened curiosity, frequently asked questions, and explored texts with greater focus. The structured stages of Survey, Question, Read, Recite, and Review enabled them to build clearer frameworks, highlight main points, and retain critical information both orally and in writing. Their mastery of content significantly improved, as they were able to organize, recall, and

rephrase ideas more effectively, thereby enhancing comprehension, critical thinking, and long-term retention.

The statistical results complemented these observations, revealing marked improvements in posttest scores compared to pretest performance. This provides strong evidence of SQ3R's effectiveness in improving reading comprehension. In line with prior research, the findings confirm that SQ3R not only develops reading skills but also fosters active participation and boosts overall academic performance when consistently applied in classroom practice.

Facet 1

Facet 1 of the theory generation process involves several interconnected steps: sampling, data collection, coding, memo writing, and theorizing, all of which may occur simultaneously. These modes of data analysis provide ways to identify, examine, compare, contrast, and interpret meaningful patterns within the data.

For sampling, purposive sampling was employed to select students with excellent reading comprehension as participants in the qualitative phase. All selected students came from the same class enrolled in the subject Developmental Reading.

During the data collection process, participants were invited to share their experiences in applying the SQ3R strategy. One participant noted that SQ3R made reading more manageable and improved his comprehension of the material: *"It is an easy reading strategy because it allows me as a reader to have a smooth process of understanding the reading material."* (P1). Another participant echoed this perspective, highlighting that the strategy provided organization and direction in her reading tasks: *"It helped me to create a concrete flow of what I am reading, sir."* (P2). Similarly, a third participant regarded SQ3R as a dependable and systematic approach: *"I find the SQ3R process a well-established reading strategy, sir."* (P3). Finally, a fourth participant shared that she did not encounter any challenges in applying the method: *"No sir, I did not find any difficulty in the process of SQ3R."* (P4).

The next step, coding, involved transforming these responses into cohesive categories to systematically represent the observed phenomenon. This process allowed the researcher to summarize and interpret participants' insights in an organized way.

Memo writing was carried out immediately after the interviews. The memos reflected how students perceived SQ3R as a helpful strategy that made reading easier and comprehension less difficult. The participants noted that the method enabled them to grasp information more effectively and become more active learners. They acknowledged that SQ3R helped them engage more deeply with the text, construct meaning from their reading, and achieve more meaningful learning. Although some initially found the steps time-consuming and somewhat challenging, they reported that continued use allowed them to adapt, refine their skills, and acquire information more effectively. Over time, the strategy not only improved their comprehension but also trained them to process texts at a deeper level, ensuring more substantial and lasting learning outcomes.

Formulated hypothesis. If students will be introduced to a well-organized strategy, students' learning outcomes would improve

With the use of the SQ3R learning strategy, students became more engaged in learning, particularly in understanding written texts. This suggests that the strategy fostered the development of mental organizational skills as they applied it. By following the structured steps of the strategy, students were able to construct and interact with knowledge more effectively, making the learning process more meaningful. Consequently, their learning outcomes were likely enhanced as a result of the skills cultivated through the strategy.

Tentative Theory. SQ3R strategy develops students' learning organization skills

An organized and structured reading strategy serves as an essential guide in developing students' reading comprehension. When learners are provided with a systematic approach, they are more likely to engage meaningfully with texts and achieve a deeper understanding of the material. Organization, therefore, becomes a key prerequisite for academic success. In reading comprehension, readers are encouraged to make sense of written texts, with lexical knowledge playing a vital role in this process. The SQ3R strategy places strong emphasis on improving comprehension by helping students derive meaning from words and context.

Reading comprehension is not merely about decoding symbols; it is a dynamic process of simultaneously extracting and constructing meaning through step-by-step interaction with written language. The effectiveness of this process depends on how well readers can interpret and connect the meaning of words to the overall text. Direct instruction in organizational strategies strengthens students' ability to manage reading tasks effectively. By fostering order and structure, students gain a clearer, more focused, and logical pathway to comprehension. Ultimately, an organized reading approach makes the reading process less complex, more purposeful, and easier to understand.

Facet 2

The same procedures were carried out in Facet 2, where another group of participants was interviewed. Their responses provided insights into the challenges encountered during the implementation of the SQ3R strategy.

Participant five (5) shared that the strategy was time-consuming and difficult to follow: *"The process is very lengthy and takes me so much time to do the different steps of SQ3R."* (P5)

Similarly, participant six (6) emphasized the difficulty of completing each of the five steps, describing the process as overwhelming: *"There are five steps to follow and each step requires tasks that are so difficult to do."* (P6)

Memoing revealed that many participants found the technique tedious and exhausting. The lengthy and complex procedures made the application of the method challenging, leaving some students feeling burned out due to their unfamiliarity with the strategy. This circumstance contributed to disinterest in using SQ3R, although they were still compelled to complete the steps as part of their assigned tasks. Methodological challenges, therefore, affected the learning process. However, on a positive note, these challenges gradually fostered the development of students' critical thinking skills, as they

sought ways to solve the problems they encountered. Students applied different approaches to overcome methodological difficulties, demonstrating resilience and adaptability.

Despite these challenges, participants acknowledged that the strategy improved their reading comprehension performance. SQ3R offered a structured approach to reading textbooks, which enhanced their understanding and retention of material. While it was not perceived as a quick method, consistent practice was noted to increase its effectiveness. Importantly, not all difficulties encountered discouraged learning; rather, some challenges promoted deeper learning and critical thinking. In the teaching-learning process, problems of varying levels of complexity are inevitable. What matters is how learners respond to these challenges—constructively and fairly. The presence of critical thinking, coupled with awareness of context and empathy, played a crucial role in enabling students to navigate and make meaning from their learning experiences.

Formulated hypothesis: SQ3R's methodological factors trigger students' critical thinking

The SQ3R strategy is widely acknowledged as an effective tool in helping students learn and understand lessons. It makes texts easier to comprehend and fosters a more active and effective reading process. Through its systematic steps, students become more engaged with the material, which enhances their comprehension skills despite the challenges they encounter. The methodological demands of the strategy encouraged learners to construct knowledge meaningfully, while also strengthening their problem-solving and critical thinking abilities.

Nonetheless, the complexity of SQ3R poses certain challenges. Because the strategy requires multiple steps, it can be time-consuming, causing some students to become hesitant in applying it consistently or to view it as monotonous. Reading is a fundamental skill, and while SQ3R provides a structured foundation for building comprehension habits, its difficulty demands persistence and effort. Despite these challenges, students who persevered with the strategy were able to use it efficiently and actively, proving that it remains a valuable method for fostering comprehension when consistently practiced.

From these findings, a tentative theory can be drawn: although students faced problems in applying SQ3R, the method significantly improved their comprehension over time. Despite the obstacles, the strategy developed critical thinking skills, reinforced comprehension, and helped establish a solid foundation for interpreting texts. Students' achievements in reading were largely attributed to their use of SQ3R, which enhanced not only comprehension but also the overall learning process.

Strong reading comprehension contributes to improved learning outcomes, and SQ3R supported students in connecting meaningfully with texts. While methodological issues could hinder progress if left unresolved, addressing them allowed students to sustain their engagement and continue making sense of what they read. In this way, SQ3R both promoted comprehension and encouraged deeper interest in the reading process, demonstrating its potential as a reliable strategy for improving literacy skills.

Facet 3

The same procedures were also carried out with the third group of participants. Their responses highlighted the challenges of encountering the SQ3R strategy for the first time.

Participant eight (8) shared that it was her initial exposure to the method and admitted finding it difficult to follow and understand: *"This is the first time that I have encountered the strategy."* (P8)

Similarly, participant nine (9) emphasized her lack of familiarity with SQ3R, noting that she struggled due to limited prior knowledge: *"I don't really have idea on how to use the strategy."* (P9)

In the same way, participant ten (10) also reported having no prior experience with the strategy: *"I haven't yet encountered this strategy since then."* (P10)

Memoing

The novelty of the reading strategy initially posed challenges for students, as its complexity and unfamiliarity often distracted them from focusing on the text. This difficulty led to moments of reduced attention and engagement. However, the very problems encountered eventually sparked curiosity and motivation, encouraging students to persist with the process. As they applied the strategy in reading activities, their memory was activated, enabling them to retain and process new information. Although sustaining interest was difficult at first, it gradually increased as learners experienced growth in their ability to acquire and organize material, leading to continuous learning.

The strategy's novelty also created an engaging learning experience that, despite its initial challenges, produced positive outcomes. The emerging theory suggests that while integrating new and unfamiliar approaches is an inherent part of learning development, students benefit from support through adequate experience, modeling, and guidance. With such scaffolding, learners may not necessarily progress faster along the continuum of comprehension, but they are able to advance with less confusion and greater confidence in their ability to make sense of the reading process.

This highlights the importance of novelty in the learning experience. Students are better able to accommodate new information when they can connect it to prior knowledge, receive appropriate modeling, and are given time to organize unfamiliar input within the teaching-learning process. Research indicates that novel stimuli are generally examined more thoroughly than familiar ones, as the brain produces heightened neural activity when encountering something new. When learners find such novelty interesting, it can lead to longer engagement with tasks, ultimately supporting deeper comprehension and learning.

Formulated Hypothesis: The more novel the strategy is, the more anxious the students will become

The challenges associated with the method created multiple difficulties in applying the strategy during reading classes. Its demanding steps and students' lack of familiarity made SQ3R more difficult to implement, often leading to

anxiety among learners. Considerable time and effort were needed to introduce the new approach. While the process sometimes resulted in longer reading sessions, it also provided an opportunity for deeper absorption of knowledge and greater retention of information. Thus, although the strategy was initially burdensome, it held the potential to enhance learning outcomes once students adapted to its structure.

For many learners, however, applying a new strategy proved ineffective at the outset. Difficulties encountered in using SQ3R made the experience challenging, particularly since the five-step process required more effort and unfamiliar cognitive engagement. The lack of prior knowledge often fostered negative attitudes, causing some students to absorb information passively, which could lead to weaker comprehension outcomes. On the other hand, because of its novelty, the strategy also stimulated positive internal responses for some students, resulting in active engagement and motivation to learn. This was especially true when the strategy was properly introduced and guided, rather than left for students to absorb independently. With adequate orientation, the novelty of SQ3R could therefore lead to more meaningful learning, transforming initial challenges into valuable opportunities for comprehension growth.

Tentative Theory: Students' perception of a new strategy affects their learning engagement

A new learning strategy cannot effectively develop students' skills if it is not properly introduced. The success of the skill-building process depends largely on how the strategy is presented and applied to learners. To enhance students' engagement and strengthen their reading comprehension, the SQ3R method can be a valuable tool, provided that its complexity is addressed during instruction. While its structured steps are designed to support comprehension, particularly for struggling readers, the difficulty of the process may at times create misconceptions about its true purpose and goals. The unfamiliarity of SQ3R often leads to anxiety among students, making the reading process appear more challenging and less engaging.

Students' perceptions of the strategy also contributed to their difficulties. Many found it challenging to apply SQ3R independently, which hindered their ability to fully integrate the approach into their reading activities. The emerging theory suggests that although the introduction of novel strategies is a natural part of learning development, students require guidance, modeling, and sufficient practice to adjust. With proper support, learners may not progress more quickly, but they can advance with reduced confusion and greater confidence in their capacity to make sense of texts. This guided process ensures that the strategy achieves its intended purpose of improving comprehension and promoting active engagement.

Facet 4

The Sample. Purposive sampling was employed to select the teacher participant for the qualitative phase of the study. The teacher shared his experience in using the SQ3R strategy and how it made a positive difference in his reading class:

"Reading class is a difficult class; I had a hard time looking for the best strategy that could really improve my students' reading comprehension. And SQ3R helped me in such way." (P7)

Coded Data. The responses were analyzed through coding, a process of transforming collected information into meaningful and cohesive categories. This procedure allowed the data to be summarized and re-presented systematically to provide a clear account of the observed phenomenon.

Memoing. The teacher highlighted that the SQ3R strategy proved useful in facilitating the teaching-learning process. Direct instruction of the strategy contributed to the development of students' reading abilities, making reading comprehension more achievable. It was evident from the teacher's account that the application of SQ3R resulted in positive learning outcomes.

Formulated Hypothesis: The more guided the strategy is, the easier it is to facilitate the teaching-learning process

Reading is a vital skill, and when teachers implement effective strategies, learners become more active in the learning process. The more structured and organized a reading strategy is, the more it can guide students in comprehending texts and facilitate the overall learning process. SQ3R, with its step-by-step approach, provides direction at each stage of reading, ensuring that learners not only engage with the material but also develop comprehension in a systematic way. Each step offers distinct learning experiences that help students extract meaning from texts and strengthen their reading abilities.

Teachers play a crucial role in facilitating this process. Their guidance and support are essential in helping students navigate the different steps of the strategy. SQ3R equips learners with a systematic framework for reading, but its success depends on careful facilitation by teachers. As students become accustomed to using the strategy, reading can evolve into both a practiced skill and a dynamic learning habit. Over time, this fosters active engagement, deeper understanding, and more effective learning outcomes.

The tentative theory drawn from this study highlights that SQ3R assists teachers in facilitating the teaching-learning process. Learning outcomes are achieved not merely through memorization but through a meaningful understanding of how knowledge is constructed and applied. When effectively implemented, SQ3R leads to stronger reading comprehension, higher engagement, and better academic performance. Students, however, do not naturally develop such strategies on their own; they require structured guidance, orientation, and continuous practice.

Based on grounded theory analysis, four tentative theories emerged. The first states that if students are introduced to a well-organized strategy, their learning outcomes will improve, leading to Tentative Theory 1: "SQ3R develops students' organizational skills." The second suggests that as the number of steps increases, the process becomes more complex, but logical sequencing facilitates learning, resulting in Tentative Theory 2: "SQ3R's methodological factors stimulate students' critical thinking." The third highlights that the novelty of a strategy may cause anxiety but also motivates learners, leading to Tentative Theory 3: "Students' perception of a new strategy influences their engagement." Finally, the fourth proposes that guided implementation makes the learning

process easier to manage, forming Tentative Theory 4: "SQ3R supports teachers in facilitating effective learning."

Reading comprehension is not instantly acquired; it requires effort, practice, and structured guidance. SQ3R enables students to break down texts into manageable processes, making comprehension easier and more meaningful. With its detailed, step-by-step approach, it helps readers gradually build skills and develop confidence in extracting information. Teachers must dedicate time to select strategies like SQ3R that cater to diverse learners in an ever-changing classroom context. Encouragement and support in adopting such strategies help students embrace their novelty positively.

The use of SQ3R encouraged students to manage their learning more effectively, allocate time wisely, and develop deeper understanding across different stages of reading. Clear guidelines on applying the strategy reinforced proper usage, while engagement in the process enhanced comprehension beyond surface-level understanding. To ensure long-term impact, SQ3R must be firmly embedded across various classes. While its implementation may be challenging, consistent practice can yield significant improvements, especially in mental organization, engagement, and overall positive learning outcomes.

The theory generated can be summarized as follows:

"Learning is better facilitated through reading activities when students are engaged in new or novel tasks, particularly those that promote mental organization and interaction both among peers and with the teacher."

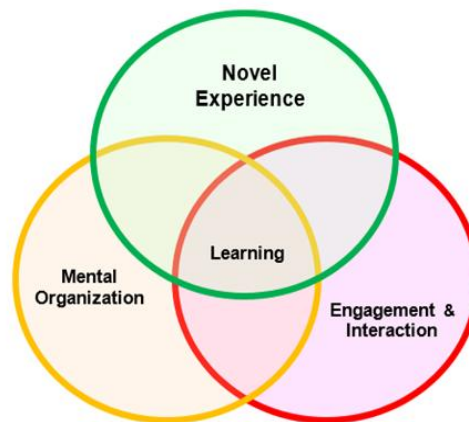


Figure 1. Conceptual Model of Cataraja's Reading- Learning Theory

In contemporary education, students are expected to cultivate autonomy, initiative, and the use of effective strategies that enable them to process and retain information. Learning strategies are essential in guiding learners to engage actively with new content, connect it with prior knowledge, and develop confidence in their abilities. Although novelty can stimulate curiosity and positive engagement, students also need to strengthen their critical thinking and organizational skills to approach challenges productively. Strategies such as visualization and structured sequencing of material allow learners to link concepts, store information in long-term memory, and attain a deeper level of comprehension. Teachers play a pivotal role in this process by fostering active

participation, ensuring that learning remains relevant, and providing appropriate support. In doing so, they help students stay motivated, inquisitive, and capable of achieving meaningful and lasting learning outcomes.

CONCLUSIONS AND RECOMMENDATIONS

A dynamic attitude toward learning enhances and strengthens the cognitive processes of successful learners. The SQ3R strategy, as a form of instructional guidance, demonstrates how learners acquire, develop, and apply cognitive processes to improve academic outcomes. Learning itself is a systematic activity, and one of its essential components is effective instructional design. SQ3R is specifically designed to make learning more purposeful and efficient, with the expectation that it aligns with the objectives of the learning environment. Learning outcomes are not simply the result of memorization but require a deeper understanding of what must be learned and how it should be approached. They emerge from the interaction between teaching actions and learning actions. To achieve optimal results, the learning process must be intentional, conscious, and supported by a well-structured instructional strategy.

ADVANCED RESEARCH

Advanced research shows that SQ3R enhances learning outcomes by promoting active processing, deeper comprehension, and effective knowledge retention through structured strategy instruction.

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