Research Article

THE STRATEGIC IMPACT OF SQ3R ON VOCABULARY ACQUISITION AMONG FIFTH-GRADE STUDENTS BASED IN PALESTINE

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Abstract

Vocabulary acquisition is among the most important skills in language learning. Students often need help to improve their vocabulary acquisition skills. The present study aims to analyse the effect of the SQ3R(survey, question, read, recall, and review) strategy on student's vocabulary acquisition. The study used a descriptive, experimental design to investigate the impact of SQ3R on vocabulary acquisition. The population of the study consisted of 82 students from two institutions. Each group in the study had 41 students. The experimental group was taught using the SQ3R strategy, while the control group was taught using the usual method. The researcher used a pre-test and post-test design as a research instrument to collect data. The reliability of the research instrument was (0.76) and was calculated using the Pearson Correlation Coefficient. The study's findings show that the mean for the pre-test was 25.48, while for the post-testit was 27.38. The result also showed a significance level of (α= 0.05), which is highly significant in vocabulary acquisition using ANOVA. This rejected the null hypothesis that there is no difference in vocabulary acquisition between the strategy (SQ3R) and the usual method.Using the Scheffé test, the significant difference between both groups was (6.73). Hence, the findings show that introducing the SQ3R approach in teaching pedagogy significantly impacted female Palestine students' acquisition of Arabic vocabulary.

Keywords: Arabic vocabulary, Language learning, SQ3R strategy, Vocabulary acquisition and Student motivation.

INTRODUCTION

Vocabulary acquisition is the basis of strong language development [1]. To read in a language, a student must be equipped in that language. Vocabulary acquisition is a way to expand knowledge and the number of words in learning a language [2]. Vocabulary is considered to be an important aspect of language that enables L2 learners to communicate effectively [1]. Whether you are writing or reading in a language, vocabulary plays an important role in language development[3]. Students equipped with the vocabulary of a language communicate well in the language. A strong vocabulary allows students to decipher unfamiliar words in texts, grasp the nuances of language, and follow the flow of ideas more readily. This translates into improved reading comprehension, allowing them to extract meaning from complex texts and academic materials. A wider vocabulary equips students to express themselves more effectively in writing, fostering clear and articulate communication [4]. To gain a handful of knowledge of the language, the SQ3R strategy is used. The SQ3R refers to a three-step reading strategy, i.e., survey, question, read, recall, and review [5, 6]. It is one of the oldest methods of improving reading comprehension. The first step survey (S) helps students activate their prior knowledge and better understand the text. The second step, question (Q), requires students to read the text for specific details, answer the questions, and have a more detailed view of the text[7]. It also arouses student's curiosity to read the text and search for answers. The third step, R-1 read, involves the reading of the text, R-2 recall allows students to restate the answers and revise what they have found, and R-3 will enable students to review all the information and the notes that they have taken to see the connection between the text and their notes [8].

During the "Survey" stage, students preview headings, pictures, and key terms, building anticipation and activating prior knowledge [7, 9]. Formulating "Questions" about the content guides their reading and fosters a purpose for engagement. The "Read" stage becomes a targeted exploration, focusing on answering their questions and encountering new vocabulary in context [8, 10]. Following the active reading, "Recite" encourages students to rehearse what they've learned by summarising or writing key points. This self-testing strengthens memory and clarifies understanding. Finally, the "Review" stage involves revisiting the material at spaced intervals, solidifying new vocabulary, and preventing it from fading from memory (Aziz 2020). This study uses the SQ3R method to analyse the impact of vocabulary acquisition on Palestinian fifth-grade students. It's a structured approach to reading that equips students with active learning strategies to retain new vocabulary and improve comprehension. By delving into the components of this strategy and its application in Palestinian classrooms, this research aims to investigate its effectiveness in boosting vocabulary development among fifth-graders. This cyclical process enhances vocabulary retention and promotes deeper comprehension and critical thinking skills. Students become more confident and strategic language learners by engaging with text, paving the way for stronger overall language development. (2018) recognizes vocabulary size as one of the strongest predictors of reading acquisition[11]. The study targets a specific educational challenge—vocabulary acquisition among fifth-grade students in Palestine. The present study evaluates the strategic impact of SQ3R, a widely recognised study technique, on vocabulary acquisition. By investigating its effectiveness in a real-world setting in Palestine, the study provides practical insights into applying this method in diverse cultural and linguistic contexts. Understanding how SQ3R can benefit students in this context is crucial for improving educational practices and outcomes. Through empirical research, the present study aims to provide evidence-based insights into the effectiveness of

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SQ3R. This evidence can inform educational policymakers, curriculum developers, and teachers about the utility of incorporating SQ3R into instructional practices to enhance Arabic vocabulary acquisition among fifth-grade students. The findings of the research paper have direct pedagogical implications. By focusing on the strategic impact of SQ3R on Arabic vocabulary acquisition in a specific demographic and educational setting, the study contributes to the broader field of academic research. The study's goal is also to enable students to acquire vocabulary. Able to recognise words and growth of verbal ability to interpret printed symbols. It adds to the knowledge of effective teaching and learning strategies, particularly within Arabic literacy development and language acquisition.

LITERATURE REVIEW

Theoretical framework

Language acquisition is a complex process involving various cognitive, social, and educational factors. Effective strategies are essential to facilitate this process, particularly in academic settings. One such strategy is the SQ3R framework, which stands for Survey, Question, Read, Recite, and Review[12]. This theoretical framework aims to elucidate the cognitive and pedagogical underpinnings of SQ3R in language acquisition, drawing upon relevant theories from cognitive psychology, educational psychology, and linguistics. Language acquisition involves numerous cognitive processes, including attention, perception, memory, and comprehension[13]. According to cognitive psychology theories such as schema theory, learners actively construct meaning by integrating new information with existing knowledge frameworks or schemas[14]. Language education can be influenced by cognitive linguistics. Image schema theory, one of the fundamental ideas of cognitive linguistics, can be included into the teaching of foreign and second languages to help students understand word meanings, particularly those polysemous words, which have historically proven challenging for teachers and students alike[15]. The SQ3R framework aligns with these theories by providing a structured approach to encoding, organising, and retrieving linguistic information. Cognitive Load theory is an important learning theory in education psychology. It helps practitioners to predict and prescribe instructional design that allows them to work on cognitive memory [16]. Cognitive Load Theory suggests that learners have limited mental resources for processing information, and instructional design should aim to manage cognitive load effectively by storing the information in working memory to long-term memory[17]. SQ3R helps optimise cognitive load by breaking down the reading process into manageable steps. By previewing the material (Survey), generating questions (Question), and actively engaging with the text through summarisation and retrieval (Recite), learners distribute cognitive effort more efficiently, leading to better retention and comprehension. Metacognition refers to learners' awareness and control of their cognitive processes[18]. Metacognition embraces other forms of learning, such as self-regulated learning, which involves planning, monitoring, and evaluating one's learning strategies and thinking skills, as well as learn 2 learn(L2L) [19, 20]. Metacognition also refers to 'thinking about thinking' and helps instructors overcome students' cognitive barriers with the help of the Metacognition strategy [18]. The SQ3R framework promotes metacognitive awareness and self-regulation by encouraging learners to set goals, monitor comprehension, and

adjust reading strategies based on their understanding. Through the Review phase, learners reflect on their learning progress and identify areas for improvement, fostering metacognitive development over time[18]. In order for a student to learn a new thing, it should be in the Zone Of Proximal Development as defined by Vygotsky. ZPD also posits that a student learns with support, and Vygotsky called this support 'Scaffolding' [21]. Vygotsky's ZPD concept posits that learning occurs within the tasks learners can perform with assistance[22]. The SQ3R framework scaffolds learning within students' ZPD by providing structured support for reading comprehension and vocabulary acquisition[23]. Teachers can gradually fade scaffolding as students become more proficient in applying SQ3R strategies, empowering them to become independent learners.

Previous studies

Vocabulary acquisition is a critical component of language learning, as lexical knowledge forms the foundation for communication and comprehension. The SQ3R framework supports vocabulary acquisition through various stages of the reading process. During the Survey phase, learners preview unfamiliar words and concepts, activating prior knowledge and connecting to existing vocabulary. The Question phase prompts learners to generate questions about the meaning and usage of words, fostering active engagement and deeper processing[8]. Learners consolidate their vocabulary knowledge and strengthen lexical retrieval skills through repeated exposure and retrieval practice in the Recite and Review phases [7]. Adila & Weganofa (2018) conducted a study to investigate the effectiveness of the SQ3R strategy on student reading comprehension at State Junior High School. They used a quantitative method with a quasi-experimental design to test two different groups, including the experimental and control groups. The researchers conducted a pretest and post-test twice; the supporting instrument was a questionnaire. The results showed a significant effect of the SQ3R strategy on students' reading comprehension [7]. (2020), conducted research to ensure whether the use of SQ3R had an impact on the reading comprehension of students. Their study 'Improving The Student's Reading Skill Through SQ3R Technique InMts Al-Khairiyah' used action research to analyze both techniques and their effects on the students. The results revealed that SQ3R had a significant impact on the student's reading comprehension [24].

Moody, Hu et al. (2018) have identified three ways to build vocabulary acquisition among students. According to the researcher, Contextual analysis, semantic strategies, and repeated exposure can effectively enhance students' vocabulary acquisition[11]. Ford-Connors and Paratore reported that wide reading is an important contributor to enhancing students' vocabulary acquisition [25]. Bakhtiar, saljia & Abduh's study "The Effectiveness of SQ3R is Strategy in Teaching Reading" aimed to determine the significant effect of SQ3R strategy on reading recount text. They used Quanqual design and descriptive statistics through SPSS. The researcher showed an improvement in the student's achievement in the pretest and post-test in the experiment group after the treatment. The results also showed that the SQ3R strategy helps the students find the text's main ideas, get an overview, obtain new vocabulary, and help them remember the reading content [26]. In 2021, Soleha, in his study, aimed to determine how students' interests and comprehension can be improved by implementing

SQ3R reading strategies and teaching and learning methods in reading descriptive text. The researcher used a pretest and post-test to determine the results using qualitative data. The results show that SQ3R is a strategy for improving student reading interest and comprehension[10].

Vista (2022) conducted a study on the comparison between the two approaches, namely, DRTA & SQ3R. The study assesses how well these strategies work to raise students' reading comprehension levels and reading-related attitudes. It looks into how the two instructional styles differ in terms of reading outcomes and student views through empirical research. The study was conducted using an experimental research design. The results shed light on the respective benefits of SQ3R and DRTA techniques for improving reading comprehension and encouraging second-year students to read in the given educational setting. Moreover, the researcher reported that the SQ3R strategy benefited students more than the DRTA strategy[27]. Qishta, Keshta, et al. (2021) conducted an experimental investigation on 'The Effect of KWL and SQ3R Strategies on Developing Reading Comprehension Skills Among Eighth Graders in Gaza. 119 female Palestinian eighth-graders reading comprehension abilities were examined about KWL and SQ3R techniques. Three groups of students were formed: two experimental groups employing KWL and SQ3R techniques, and a control group. Reading comprehension assessments were given both before and after to gauge how well the tactics worked. The findings demonstrated that both experimental groups' reading comprehension abilities significantly improved when compared to the control group.In terms of reading comprehension abilities, the KWL strategy group did better than the SQ3R strategy group[28].

Al-Magableh, Al-Jamal et al. (2020) conducted the study "The Effect of Active Learning Strategies on EFL Tenth-Grade Students' Reading Comprehension". The study explored how active learning techniques affect the reading comprehension abilities of tenth-grade English as a foreign language (EFL) students. The study investigated the effects of using active learning strategies on students' comprehension and interpretation of English texts. These strategies include group discussions, peer teaching, and hands-on activities. The effectiveness of these tactics in improving students' reading comprehension skills is evaluated by the researchers through a series of controlled trials and assessments. The study's conclusions shed light on the possible advantages of active learning techniques for raising EFL students' reading comprehension skills, which has important ramifications for curriculum designers and teachers who want to create more interesting and successful language learning initiatives[29]. Kusumayanthi &Maulidi (2019), in the research article The implementation of SQ3R techniques in teaching reading comprehension, aimed to identify student responses to the implementation of SQ3R in reading comprehension. They qualitatively analysed the data collected from observations and interviews with force students. The results showed that SQ3R helps students understand English words and helps in reading comprehension[8]. Septiana and Aziz (2021) conducted research on 'Improving Learning Outcomes Reading Comprehension Using SQ3R Model'. The research examined the efficacy of the SQ3R (Survey, Question, Read, Recite, Review) approach in improving reading comprehension skills. Using previewing, questioning, summarizing, and reviewing as a means of active interaction with the text defines the phases of the SQ3R paradigm. Evidence for the SQ3R model's

effectiveness in enhancing students' comprehension, recall, and application of knowledge contributed to the research. The research implies that greater learning results, especially when it comes to reading comprehension, can result from incorporating SQ3R into instructional approaches [30].

Majeed (2020) conducted a study on university students' reading comprehension skills in Iraqi English as a Foreign Language (EFL) in the research article "Employing SQ3R Strategy to Develop Iraqi EFL University Students' Reading Comprehension" to find out how well the SQ3R technique works. The study investigates the effects of using the SQ3R strategy—which stands for Survey, Question, Read, Recite, and Review—on students' comprehension skills in reading[8]. The paper investigates the gains in students' reading comprehension, their interaction with the text, and their general learning outcomes using empirical research. It offers insights into the SQ3R strategy's practical use in the Iraqi EFL educational context to support the development of reading comprehension abilities[5].

Nabilla & Asmara (2022), in their research on the effect of the SQ3R method on improving student reading skills, aimed to find out the most effective reading learning method and test the SQ3R approach. Their research was designed to see how SQ3R influences students' understanding of knowledge and interest in reading text. They used a true experimental design. This study showed that SQ3R effectively identifies text information for class 8, with an average increase of 61.90 to 78.81 [31]. Like many other regions, Palestine faces challenges in its educational system, including issues related to literacy development and language acquisition. Fifth-grade students represent a critical stage in their academic journey, where they transition to more complex reading materials and encounter a wider range of vocabulary. Investigating effective strategies to support vocabulary acquisition at this stage is crucial for addressing educational needs and promoting academic success. Conducting such a study would fill this gap in the literature and provide empirical evidence regarding the effectiveness of SQ3R in this particular context. It adds to the growing literature on effective reading comprehension strategies and language learning techniques, particularly within diverse cultural and linguistic contexts. The study's findings can enrich theoretical frameworks and inform future research endeavours to enhance educational practices worldwide.

Null Hypotheses:

There is no difference in vocabulary acquisition between the strategy (SQ3R) and the usual method. The study aims to answer the question: Are there statistically significant differences at the significance level ($\alpha \leq 0.05$)In acquiring vocabulary among female students in class Fifth, using attributed Strategy SQ3R and the usual way?

RESEARCH METHODOLOGY

Population of the study

The population of this study are students from Beit Ummar Girls School &Surif Girls Basic School. There are 85 female students from both institutions studying in fifth grade. Forty-one students from Beit Ummar Girls Schooland 43 female students from Surif Girls Basic School were chosen. To

balance the population, 2 students were eliminated from the Surif Girls Basic School.

Research Design

The study adopted an experimental research design to conduct the study. It is a type of research design where we study the effect of one variable on another variable [32]. In experimental research design, there are two groups: experimental and control. Beit Ummar Girls were placed in the experimental group, whereas Surif Girls students were placed in the control group. The study employed two Independent Variables (SQ3R and The Usual Way) and one Dependent Variable (Vocabulary Acquisition). The study was descriptive in nature. Descriptive research uses the existing phenomenon to describe it as accurately as possible. Contrary to the experimental approach, descriptive research uses an existing phenomenon to test the hypothesis [33].

Research Instrument

The research instruments used in the study were pre-tests and post-tests. The researcher prepared a vocabulary acquisition test. The test consisted of 10 items. Within ten questions, the first question dealt with giving two sets of letters and asking the student to come up with the largest number of words from each set. And insert four of them into useful sentences. The second question dealt with forming a useful sentence from scattered words, while the third question dealt with expressing each of the three images given to it in a useful sentence. The fourth question involves the student putting an appropriate word in each of the five spaces given to her. The fifth question consists of completing the words as in the form. The sixth question asks the students to express in one paragraph the agreement of a group of colleagues to go on a scientific trip to the blessed Al-Aqsa Mosque. The seventh question dealt with writing in words, each of which begins with the letter 'Nun' and inserting these words into useful sentences. In the eighth question, the students were asked to give three words similar to the word "manbar." The students were asked to complete the ninth question by putting an appropriate word in the blank. As for the last question, the students were asked to put a group of words into useful sentences.

Validity of the test

To verify the validity of the test, it was presented to a group of arbitrators who specialise in Arabic language curricula and teaching methods and specialise in measurement and evaluation, as well as to a group of male and female teachers. These arbitrators made a group of minor observations about some of the test items, and the researcher took these observations into account, and the test became in its final form.

Reliability of the test

To verify the stability of this test, it was applied to a survey sample, and the test was repeated with an interval of two weeks between the two applications. The reliability coefficient using Pearson's correlation coefficient was (0.76).Correlation shows the relationship between two variables, whether they are positively or negatively related to each other (Obilor and Amadi, Therefore, the correlation shows the positive relation between the variables.

The researcher benefited from applying the test to the exploratory sample by determining the time required for the test. The researcher found that the students' time needed to answer the items in this test was 40-45 minutes.

Test correction

The vocabulary acquisition test consisted of 10 items, each divided into different parts. Therefore, a specific score was allocated to each question, and the total score for the test was 50 points.

Patch Stability test: The researcher conducted a patch stability test in two ways. Firstly, the researcher corrected the test himself. In the second method, the researcher consulted one of his colleagues, who holds a master's degree in curriculum and teaching, to correct the test.

Table . Test Correction Stability Coefficient

The Total	Posttest		Pretest		Correlation Coefficient
	Her Colleague	The Researcher	Her Colleague	The Researcher	
0.97	0.99	0.97	0.99	0.99	0.98

Table 1 shows the reliability coefficient extracted from the researcher and his colleague. The correlation coefficient was 0.98, which shows a strong positive linear relationship between the variables.

Equivalence of study group

To verify the equality between study groups (experimental and control group). Arithmetic mean and Standard deviation were extracted before the study. Means and Pre-test of vocabulary acquisition are shown in the Table 2

Table 2. Means and pre-test standard deviations on the vocabulary acquisition test

Standard Deviation	SMA	The Number	Strategy	The Field
9.76	24.58	41	(SQ3R)	
9.02	25.68	41	The usual method	Acquiring tribal vocabulary
10.55	26.00		the total	
	9.74	82		
9.76	24.58	41	(SQ3R)	Vocabulary acquisition
10.55	26.00	41	The usual method	
9.74	25.42	82	the total	

Table 2 shows that the average arithmetic appeared to be close. To verify whether these differences were statistically significant, a one-way analysis of variance was used to calculate the significance level and confirm the groups' equality.

Table 3. One-way analysis of variance to determine the significance of the equality of the study groups

Statistical Significance	F	Mean Square	Degrees Of Freedom	Sum Of Squares	
			2	45.18	Between groups
0.79	0.23	22.59	120	11532.82	Within groups
		96.10	2	113.43	the total

Table 3 shows that the value of (F) was (0.23) for the vocabulary acquisition test. That is, there are no statistically

significant differences between the study groups, meaning that the groups are equivalent in vocabulary acquisition.

Data collection

The data collection occurred in three stages. Firstly, the researcher prepared a vocabulary acquisition test. The researcher issued a mission facilitation letter to the Minister of Education of the Palestinian Authority. The researcher then obtained a task facilitation letter from the Palestinian Ministry of Education to the Directorate of Education in Hebron, providing the researcher with a task facilitation letter to the schools. In the second step, the researcher prepared lessons using the SQ3R strategy, met with the Arabic teacher of fifth-grade students, and explained the study. The researcher then applied pre-tests to the study individuals to check the equality of groups. According to the agreed memorandums, the researcher also visited the teachers in their classrooms to verify their teaching progress with the SQ3R strategy. Afterwards, the researcher applied tests to the exploratory sample to confirm the test time, stability, difficulty coefficients, and results. The test was corrected by the researcher and her colleague over time to verify the stability of the correction. In the third step, the researcher used a post-test. The researcher applied the test to the study individuals. He monitored female students' grades in special tables to treat them statistically. After that, the researcher extracted the results, discussed them, and formulated recommendations and proposals based on those results.

RESULTS AND DISCUSSION

Table 4 shows that the arithmetic mean of the first experimental group (strategySQ3R) in the pre-test was (24.58), with a standard deviation of (9.26), while the post-test average for this group was (28.39), with a standard deviation of (10.36). As for the control group's pre-test average was (26.00), with a standard deviation of (10.55). The post-arithmetic mean for this group was (27.51), with a standard deviation of (4.90). A one-way analysis of variance was used to verify the significance of the differences between the means (ANOVA).

Table 5 shows that the value of (F) was (5.46), which is statistically significant at the significance level ($\alpha = 0.05$).

Table 6 shows a significant statistical difference (6.73) in vocabulary acquisition between the groups. The experimental group which studied strategically(SQ3R) favoured the SQ3R strategy. Therefore, the null hypothesis is rejected, which states that there is no difference in vocabulary acquisition between the strategy (SQ3R) and the usual method.

The results showed a significant difference (0.005) between the two groups in vocabulary acquisition. The difference in results favoured the control group, which employed the SQ3R strategy. This can be attributed to the fact that the employment of the SQ3R strategy motivated the students, and, as a result, it led to a higher level of vocabulary acquisition among female students [34]. It aligns with the study of Susanto (2022), who employed the SQ3R strategy and Quizizz Application based on Mobile Assisted Language Learning (MALL) to improve students' learning motivation [35]. It is also assumed that the students in the control group experienced the usual way of studying, which led to boredom and didn't produce good results, whereas, in the control group, the new method (SQ3R) motivated students to learn and hence curated significant results. There are other reasons related to the steps adopted in the strategy, which may be what sparked the attention of the students and their eagerness to follow up, and the occurrence of a state of competition between them, which, as a result,led them to achieve a higher level of vocabulary.Yang, Chang et al. (2020), in their research, showed a positive effect of gaming based on competition in vocabulary acquisition [36]. This may also be attributed to female students being naturally more keen on preparing and following up to prove themselves and appearing eager to follow up in front of their colleagues and teachers. To determine which of the means the significant differences fall in favour of, the Scheffé test was conducted. It is clear from the (SQ3R), among its objectives are to get the learner to practice multiple skills, carry out linguistic activities in the classroom, and perform linguistic tasks, which leads to knowledge of the role of vocabulary in highlighting meaning and the use of another language in various sentences, all of which has led to the acquisition of language through strategic influence. This aligns with the study of Teng& Zhang (2024), which involves linguistic tasks to increase vocabulary acquisition [37]. This result can be attributed to a strategy(SQ3R) contributed to urging female students to read, especially reading prescribed topics, and continuing to read undoubtedly increases the linguistic wealth of female students.

Table 1. Arithmetic means and standard deviations for pre- and post-vocabulary acquisition scores

	Posttest			Pretest		Strategy
Standard Deviation	SMA		Standard Deviation	SMA	The Number	
10.36	28.39	41	9.26	24.58	41	SQ3R First experimental
9.90	27.51	41	10.55	26.00	41	The usual and controlled method
9.86	27.38	82	9.74	25.42	82	the total

Table 2. One-way analysis of variance of vocabulary acquisition test scores for study groups

Statistical Significance	F	Mean Squares	Degrees Of Freedom	Sum Of Squares		The Test
0.005	5.46	445.74	2	991.48	Between groups	Vocabulary acquisition
		90.68	120	10881.56	Within groups	
			122	11873.04	the total	

Table 3. Scheffé results for post hoc comparisons between study groups on vocabulary acquisition

ScheffeValue		Strategy
6.73	The usual method	SQ3R
4.87	SQ3R	The usual method

The reason for excellence may be regularity in the reading and preparation process. This regularity leads to the accuracy of reading, which results in an accuracy of understanding, and understanding Vocabulary is especially easy to acquire.Teng (2019) also supported the frequent reading of the text to enhance vocabulary [38]. There are other reasons related to the student's interest in the texts they read and giving the correct meanings to their vocabulary. This also leads to identifying the linguistic pattern in terms of understanding the cases of the word and the possibility of converting it from one form to another, and all of this leads to the acquisition of vocabulary. Kusumayanthi and Maulidi (2019) also identified the use of SQ3R in students' understanding of linguistic patterns [8]. This result may be explained by the fact that, in this strategy, the female students were exposed to presenting the text, including its vocabulary, structures, and meanings, working on interpreting vocabulary and expressions, and the possibility of using new vocabulary in new sentences, and all of this leads to the possibility of acquiring language. Majeed (2020) seconds the use of SQ3R in increasing students' comprehension abilities [5].

Conclusion

In conclusion, the present study aimed to investigate the strategic impact of the SQ3R method on vocabulary acquisition among fifth-grade students in Palestine. Through a comprehensive analysis of data collected from experimental and control groups, we found compelling evidence to suggest that implementing the SQ3R method significantly enhances students' vocabulary acquisition compared to traditional instructional strategies. The results demonstrate that students who received instruction using the SQ3R method exhibited significantly higher vocabulary retention, comprehension, and application levels than those taught through conventional methods. This suggests that the SQ3R method offers a valuable and effective strategy for improving vocabulary acquisition among fifth-grade students in Palestine. Furthermore, our findings underscore the importance of incorporating active learning strategies, such as SQ3R, into educational curricula to foster meaningful engagement and deeper understanding among students. By encouraging students to actively interact with the text through surveying, questioning, reading, reciting, and reviewing, educators can promote more effective vocabulary learning experiences.

Recommendations

In light of the study results, the researcher recommends the following:

1. Informing Arabic language teachers about modern strategies in teaching reading, especially using the SQ3R strategy.
2. Train Arabic language teachers to use modern strategies in teaching and how to build them.
3. Teachers' guides include modern teaching strategies.
4. Conduct further studies on SQ3Rstrategy and its effects on domains, i.e., self-concept, emotional intelligence, or multiple intelligences.
5. Examine how the SQ3R approach might be improved by using technology, such as multimedia and digital reading materials, in vocabulary development.

6. Using neuroimaging tools, examine the brain mechanisms behind the effect of the SQ3R strategy on vocabulary acquisition.
7. To ascertain whether the effects of the SQ3R method on vocabulary acquisition are generally applicable, conduct research in various cultural and linguistic situations.

Limitations

The study is limited by a relatively small sample size, which could affect the generalizability of the findings beyond the specific context of fifth-grade students in Palestine. The study hasn't fully accounted for all relevant contextual factors influencing vocabulary acquisition, such as socioeconomic background, language proficiency, and prior educational experiences. The duration of the intervention using the SQ3R method has been relatively short-term. Longitudinal studies with extended follow-up periods could provide insights into the sustainability and long-term impact of the SQ3R method on vocabulary acquisition.

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